

Elevators and Escalators

- Scope – The City intends to issue a DB contract to furnish, install, test, and commission all elevator and escalator equipment.
- Status – The City anticipates procuring this contract in 2011. Limited PE has been completed for this package.
- Schedule – Following are the key contract dates:
 - Advertise – July 2011
 - Bid-Award – October 2011
- Issues or Concerns
 - None identified at this time.

Appendix C: PE Status by Contract

Note: Within the context of this matrix, Advanced PE is subjectively defined as greater than 30% and less than 65%. Design development greater than 65% typically occurs during Final Design. Within the confines of the DB contracts, the Special Provisions define the following design stages:

- (1) *Definitive Design*
- (2) *Interim Design*
- (3) *Final Design*
- (4) *Working Plans*
- (5) *As-Constructed Plans and Specifications*

The Special Provisions of each contract provide specific criteria for each design phase.

Contract	Segment	PE Status	Notes
West Oahu Farrington Highway Guideway DB Contract	Segment I – East Kapolei to Pearl Highlands Length: 6 miles	GEC I prepared contract documents for DB procurement, including 30% plans. Advanced PE continuing by Kiewit under NTP #1, 1A, 1B & 1C. The City issued NTP #2 on March 3, 2011 for work activities related to the relocation of utilities based on the City's pre-award authority associated with the FTA's issuance of a ROD. Kiewit submitted Definitive Design Submittals and has begun preparing Interim Design submittals. Geotechnical investigations ongoing by Kiewit. Method (3) and Load Test Shafts (6) have been completed. Two Load Test Shafts are remaining, which continue to support Definitive Design submittals that started on October 18, 2010. Interim Design will continue once the test and demonstration drilled shafts activity is completed.	
Kamehameha Highway Guideway DB Contract	Segment II – Pearl Highlands to Aloha Stadium Length: 4 miles	GEC I prepared contract documents for DB procurement, including 30% plans. The City selected Kiewit as the contractor who will advance plans to Definitive and Interim Design levels under limited NTPs. The City intends to issue NTP #1 in May 2011.	
Airport Guideway Contract and Utilities Relocation DBB Contract	Segment III – Aloha Stadium to Middle Street Length: 5 miles	GEC I prepared 30% plans for segment. Advanced PE will be performed with City's selection of design consultant in June 2011 and issuance of NTP in August 2011.	

Contract	Segment	PE Status	Notes
City Center Guideway & Utilities DBB Contracts	Segment IV – Middle Street to Ala Moana Center Length: 5 miles	GEC I prepared 30% plans for segment. Advanced PE will be performed with City's selection of design consultant in December 2011.	
Maintenance & Storage Facility DB Contract	Segment I	GEC I prepared contract documents for DB procurement, including 30% plans. The City has selected Kiewit/Kobayashi as the contractor who will advance plans to Definitive and Interim Design levels under limited NTPs. The City intends to issue NTP #1 in May 2011.	
WOFH Station Group (3) DBB Contract	Segment I	GEC I prepared 20% plans for segment. Advanced PE will be performed by URS the City's design consultant in July 2011. FD is anticipated to begin in September 2011.	
Farrington Station Group (3) DBB Contract	Segment I	GEC I prepared 20% plans for segment. City selected HDR/HPE, Inc as the design consultant and issued NTP #1A on January 12, 2011 to begin preparing the Schedule of Milestones. NTP # 1B was issued on March 15, 2011 to begin advanced PE.	
Kamehameha Station Group (3)	Segment II	GEC I prepared 20% plans for segment. Contract is expected to be released in late March 2011. FD anticipated to begin in October 2011.	
Airport Station Group (3)	Segment III	GEC I prepared 20% plans for segment. FD anticipated to begin in March 2013.	
Dillingham Station Group (3)	Segment IV	GEC I prepared 20% plans for segment. FD anticipated to begin in August 2013.	
City Center Station Group (3)	Segment IV	GEC I prepared 20% plans for segment. FD anticipated to begin in January 2014.	
Kakaako Station Group (3)	Segment IV	GEC I prepared 20% plans for segment FD anticipated to begin in August 2014.	
Pearl Highland H2 Ramps and Multiple Parking Structure	Segment I	GEC I prepared 20% plans. FD anticipated to begin in December 2015.	

Contract	Segment	PE Status	Notes
Core Systems Contract DBOM Contract	Segment I-IV	GEC I prepared contract documents for DBOM procurement, including 15-20% plans. Contractor will advance the conceptual drawings and performance specifications in the RFP Part 2 contract documents to the Definitive and Interim Design levels during the early portion of contract. Ansaldo Honolulu Joint Venture was selected on March 21, 2011 with NTP #1 anticipated to be issued in May 2011.	PMOC is of the opinion that various levels of detail, which include basic conceptual drawings with limited performance criteria, have been completed by the GEC. This information must be augmented by technical proposal from the selected contractor, which is under review by the PMOC.

Appendix D: Bidding Schedule

Contract	Type	RFP - DBB		RFP Part 1 - DB		RFP Part II - DB		Exec.	LONP Request			NTP				Contr. Value (M) ¹
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.	NTP Value (M)	
West Oahu Farington Highway (WOFH) Guideway	DB	N/A	N/A	04-Feb-09	13-Mar-09	03-Apr-09	28-Aug-09	17-Nov-09	18-Apr-11 (Pre-FD)	—	—	1	01-Dec-09	PE to support to FEIS	\$48.2	\$482.9
												1A	11-Mar-10	Geotech	\$4.7	
												1B	23-Mar-10	Interim Design (PE)	\$21.2	
												1C	04-Jun-10	Test Shafts	\$14.0	
												1D	TBD	Admin & Bonds	TBD	
												2	15-Feb-11	Utility Relocations	—	
												3	15-Aug-11	FD	—	
												4	15-Sep-11	Construction	—	
Kamehameha Highway Guideway (KHG)	DB	N/A	N/A	18-Nov-09	05-Jan-10	19-Mar-10	07-Oct-10 (BAFO due 20-Dec-10)		—	—	—	1	08-May-11	PE	—	\$574
												2	TBD	FD	—	
												3	TBD	Construction	—	
Maintenance and Storage Facility (MSF)	DB	N/A	N/A	29-May-09	02-Jul-09	24-Jul-09	17-Feb-10		—	—	—	1	15-Mar-11	PE	—	\$195.0
												2	08-Aug-11	FD	—	

Contract	Type	RFP - DBB		RFP Part 1 - DB		RFP Part II - DB		Exec.	LONP Request			NTP				Contr. Value (M)
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.	NTP Value (M)	
Vehicle/Core Systems Contract (CSC)	DBO M	N/A	N/A	09-Apr-09	05-Jun-09	17-Aug-09	07-Jun-10 (BAFO due 18-Jan-11)		—	—	—	3	28-Nov-11	Construction	—	
Airport Utility Relocation	DBB	01-Nov-12	28-Feb-13	N/A	N/A	N/A	N/A		—	—	—	—	02-Mar-11	—	—	\$372
Airport Guideway	DBB	22-Feb-13	22-Jun-13	N/A	N/A	N/A	N/A		—	—	—	—	01-Mar-13	—	—	
City Center Utility Relocation	DBB	15-Feb-13	14-Jun-13	N/A	N/A	N/A	N/A		—	—	—	—	23-Jun-13	—	—	
City Center Guideway & Ala Moana Station	DBB	7-Nov-13	6-Mar-14	N/A	N/A	N/A	N/A		—	—	—	—	15-Jun-13	—	—	
West Oahu Station Group (3)	DBB	15-Aug-12	12-Dec-12	N/A	N/A	N/A	N/A		—	—	—	—	16-Apr-14	—	—	
Construction DBB Contract	DBB	01-Mar-12	28-Jun-12	N/A	N/A	N/A	N/A		—	—	—	—	13-Dec-12	—	—	
Farrington Station Group (3)	DBB	11-Jun-15	08-Oct-16	N/A	N/A	N/A	N/A		—	—	—	—	29-Jun-12	—	—	
Pearl Highlands Parking and Ramps	DBB	25-Oct-12	21-Feb-13	N/A	N/A	N/A	N/A		—	—	—	—	09-Oct-16	—	—	
Kamamela Station Group (2)	DBB	07-Jun-14	04-Oct-14	N/A	N/A	N/A	N/A		—	—	—	—	22-Feb-13	—	—	
Airport Station Group (3)	DBB	04-Nov-14	03-Mar-15	N/A	N/A	N/A	N/A		—	—	—	—	05-Oct-14	—	—	
Dillingham Station Group (3)	DBB			N/A	N/A	N/A	N/A		—	—	—	—	04-Mar-15	—	—	

Contract	Type	RFP - DBB		RFP Part 1 - DB		RFP Part II - DB		Exec.	LONP Request			NTP				Contr. Value (M) ¹
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.	NTP Value (M)	
City Center Station Group (3)	DBB	01-Jun-15	30-Apr-15	N/A	N/A	N/A	N/A		—	—	—	—	01-May-15	—	—	
Kakaako Station Group (3)	DBB	14-Nov-15	12-Mar-16	N/A	N/A	N/A	N/A		—	—	—	—	13-Mar-16	—	—	
Elevators/Escalators	DBB	02-Jul-11	25-Oct-11	N/A	N/A	N/A	N/A		—	—	—	—	25-Nov-11	—	—	
Plants and Shrubs (Owner Furnished)	DBB	01-Aug-11	15-Dec-11	N/A	N/A	N/A	N/A		—	—	—	—	02-Jan-12	—	—	
Fare Collection (Owner Furnished)	DBB	—	—	N/A	N/A	N/A	N/A		—	—	—	—	—	—	—	

¹ Indicates actual bid amount

Appendix E: PE Approval Letter Requirements

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
Project Scope, Design and Development						
1	Identify any third party agreements necessary for project completion, including utility agreements with private and public owners and military	LR / HLB	Jan-10	Jan-10		Complete
2	Resolve the specific regarding proximity of the guideway to runways 22R/4L and 22L/4R at the Honolulu International Airport with HDOT and FAA	HLB	Apr-10	May-10		Complete
3	Fully develop vehicle basis of design and functional sizing	JS	Apr-11		2.11 (CSC) 2.15 (CSC) 3.24 3.31 CSC Proposal	Selected CSC proposal under review by PMOC to determine whether it meets operational criteria
4	Determine rail fleet size requirement	JS	Apr-11		3.24 CSC Proposal	Selected CSC proposal under review by PMOC
5	Fully develop scope for the administration building and operations control center	JS / HLB	May-11		2.11 (MSF) 2.15 (MSF) 3.24 3.31	
6	Determine the final location of the maintenance and storage facility	FM	Apr-11		3.62	License Agreement is under review
7	Finalize a contracting packaging plan which includes a source selection plan(s) and contract specific work plans	SZ	Mar-11	Mar-11	3.51	Complete
8	Develop strategies to streamline the City's process to award contracts and to enter into grant agreements, especially as applicable to FTA grants	LR	Jun-11		HART Res. Do we need more here?	Resolution provided to FTA and PMOC after City Council approval in Dec-09. Will be included on ballot in Nov-10 election.
9	Develop a preliminary operation plan	JS	Mar-10	08-Feb-10		Complete

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
10	Ensure the service velocity does not erode over the next course of design changes	JS	Apr-11		2.11 (CSC) 2.15 (CSC) CSC Proposal	Selected CSC proposal under review by PMOC
Project Schedule						
11	Provide a baseline of the master Project Schedule (MPS) early in PE which will be used for monthly progress updates and tracking schedule variances	MH	Mar-11		2.24	Under review by PMOC
12	Address the utilization manpower and equipment resource loading and budget and cost loading	MH	Mar-11		2.24	MPS under review by PMOC; City acknowledged that schedule is cost loaded but will not be resource loaded
13	Include critical activities in the MPS: utility activities, real estate acquisitions, system integration, starting and testing, operational commissioning and training, vehicle procurement, major construction material procurement, FTA review and comment, detail activities for early construction packages	MH	Mar-11		2.24 2.25 2.26	MPS under review by PMOC
14	Develop a right-of-way schedule	MH	Mar-11		2.26	Under review by PMOC
15	Modify the Work Breakdown Structure to cross over with the project budget and cost breakdown structure	MH	Jan-10	21-Dec-09		Complete
Project Cost						

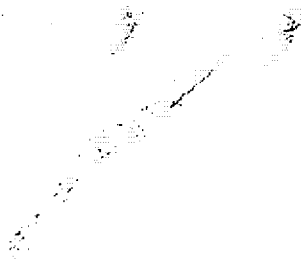
No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
16	Develop a detailed bottoms-up-style project cost estimate to Standard Cost Category format. The estimate should be detailed sufficiently to determine distributions of materials, labor, equipment and general conditions elements at a minimum. The soft cost estimates should be based on staffing plans, force account plans, contracts and so forth rather than solely on percentages. The estimate should eliminate parametric-style values, cost estimating relationships, and lump sums as much as possible during PE	MH	Apr-11		2.21 2.22 2.23	Under review by PMOC
17	Escalate the cost estimate in accordance with the MPS	MH	Apr-11		2.21 2.22 2.23	Under review by PMOC
18	Provide justification and backup documents to support the quantification and assumptions for the "soft costs" and related general conditions of the project	MH	Apr-11		2.23	Under review by PMOC
Technical Capacity						
19	Configuration management and change control mechanism	KG	Feb-11	Jan-11	3.10 et al 3.32	Complete
20	Develop detailed staffing plans for all remaining phases of the project to ensure adequate technical capacity. The plans should include the dates by which the City will fill each key position. All key City management positions should be filled during PE.	TH/PR	Mar-11		3.02	Under review by PMOC
21	Work with the State of Hawaii to establish a State Safety Oversight Agency office to oversee the project	KA	Apr-10	6-Apr-10		Complete
22	Submit a fully developed Rail Fleet Management Plan	JS	Apr-11		3.24	Under review by PMOC

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
23	Have a quantifiable metrics for measuring the real status of work, both cost and schedule of all professional service contracts, and any inter-local agreements for participatory services	MH	Apr-11		3.10 et al	
24	Develop a Contingency Management Plan which will identify the specific risks and implement the anticipated mitigation measures	SZ	May-11		3.22	
25	Develop an Environmental Mitigation Program that identifies required environmental mitigation actions and the party responsible for the mitigation and that will eventually become the basis for quarterly mitigation monitoring and quarterly mitigation reports	JA/EM	Dec-10	Jan-11	3.33	Complete
26	Update and implement the:					
	Real Estate Acquisition and Management Plan	JL	Jan-11	Jan-11	3.23	Complete
	Bus Fleet Management Plan	PK	May-11		3.25	BFMP will be finalized based on data from Financial Plan
	Safety and Security Management Plan	KA	Apr-11		3.26	
	Quality Management Plan	AB	Dec-10	12-Jan-11	3.35	Complete
					3.36	

*Note: Actual Date to be added only upon verification of satisfactory completion by FIA and/or PMOC.

Appendix F: Project Overview and Map (Transmitted as a separate file)

Appendix G: Safety and Security Checklist (Transmitted as a separate file)



MAIN WORKSHEET-BUILD ALTERNATIVE

City and County of Honolulu

Honolulu Rail Transit Project, East Kapolei to Ala Moana Center via Airport

Preliminary Engineering

Today's Date 01/08/10

Yr of Base Year \$ FY 2009

Yr of Revenue Ops FY 2010

	Quantity	Base Year Dollars w/o Contingency (X000)	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)	Base Year Dollars Unit Cost (X000)	Base Year Dollars Percentage of Construction Cost	Base Year Dollars Percentage of Total Project Cost	VOE Dollars Total (X000)
10 GUDWAY & TRACK ELEMENTS (route miles)	20.09	1,126,982	281,740	1,408,728	\$ 70,168	49%	32%	1,677,817
10.01 Guideway: At-grade exclusive right-of-way				0				0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)				0				0
10.03 Guideway: At-grade in mixed traffic				0				0
10.04 Guideway: Aerial structure				0				0
10.05 Guideway: Built-up fill				0				0
10.06 Guideway: Underground cut & cover				0				0
10.07 Guideway: Underground tunnel				0				0
10.08 Guideway: Retained cut or fill	0.34	5,527	1,382	6,909	\$ 20,098			8,228
10.09 Track: Direct fixation		123,329	30,832	154,162				183,603
10.10 Track: Embodied				0				0
10.11 Track: Ballasted				0				0
10.12 Track: Special (switches, turnouts)		9,660	2,415	12,075				14,382
10.13 Track: Vibration and noise dampening				0				0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	21	244,504	61,126	305,630	\$ 14,554	11%	7%	389,152
20.01 At-grade station, stop, shelter, mall, terminal, platform				0				0
20.02 Aerial station, stop, shelter, mall, terminal, platform	21	196,269	46,567	242,836	\$ 11,087			286,464
20.03 Underground station, stop, shelter, mall, terminal, platform				0				0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.				0				0
20.05 Joint development				0				0
20.06 Automobile parking multi-story structure				0				0
20.07 Elevators, escalators		58,236	14,559	72,795				92,688
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS								
30.01 Administration Building: Office, sales, storage, revenue counting		97,280	24,320	121,600	\$ 6,052	4%	3%	138,499
30.02 Light Maintenance Facility		16,665	4,166	20,831				23,726
30.03 Heavy Maintenance Facility		80,615	20,154	100,769				114,773
30.04 Storage or Maintenance of Way Building				0				0
30.05 Yard and Yard Track				0				0
40 SITEWORK & SPECIAL CONDITIONS								
40.01 Demolition, Clearing, Earthwork		575,617	181,639	757,256	\$ 37,688	27%	17%	895,470
40.02 Site Utilities, Utility Relocation		25,630	8,970	34,600				40,915
40.03 Haz. mat'l, contain'r soil removal/mitigation, ground water treatments		331,739	116,109	447,848				529,589
40.04 Environmental mitigation, e.g., wetlands, historic/archeologic, parks		10,139	3,543	13,682				16,186
40.05 Site structures including retaining walls, sound walls		9,835	3,442	13,278				16,701
40.06 Pedestrian / bike access and accommodation, landscaping				0				0
40.07 Automobile, bus, van accessways including roads, parking lots		198,275	49,569	247,843				294,079
40.08 Temporary facilities and other indirect costs during construction				0				0
50 SYSTEMS								
50.01 Train control and signals		203,330	50,633	254,163	\$ 12,649	9%	6%	311,215
50.02 Traffic signals and crossing protection		34,610	8,652	43,262				52,974
50.03 Traction power supply: substations		24,225	6,055	30,281				37,079
50.04 Traction power distribution: catenary and third rail		41,990	10,497	52,487				64,269
50.05 Communications		69,478	17,119	86,597				104,811
50.06 Fare collection system and equipment		20,811	6,203	26,013				31,852
50.07 Central Control		4,361	1,090	5,452				6,676
50.08		8,856	2,214	11,070				13,564
Construction Subtotal (10-50)		2,247,714	599,663	2,847,377	\$ 141,795	100%	64%	3,412,153
60 ROW, LAND, EXISTING IMPROVEMENTS								
60.01 Purchase or lease of real estate		85,634	42,817	128,452	\$ 6,393		3%	128,635
60.02 Relocation of existing households and businesses		83,264	41,632	124,897				125,075
		2,370	1,185	3,555				3,660
70 VEHICLES (number)	76	275,239	66,056	341,297	\$ 4,491		8%	398,325
70.01 Light Rail				0				0
70.02 Heavy Rail	76	245,670	58,963	304,638	\$ 4,008			355,987
70.03 Commuter Rail				0				0
70.04 Bus				0				0
70.05 Other				0				0
70.06 Non-revenue vehicles		4,966	1,199	6,165				7,230
70.07 Spare parts		24,568	5,836	30,404				35,599
80 PROFESSIONAL SERVICES (applies to Cmts. 10-50)								
80.01 Preliminary Engineering		169,972	157,358	327,330	\$ 37,194	26%	17%	393,589
80.02 Final Design		17,752	4,736	22,488				28,001
80.03 Project Management for Design and Construction		99,334	26,501	125,835				157,190
80.04 Construction Administration & Management		97,623	26,045	123,668				154,481
80.05 Professional Liability and other Non-Construction Insurance		220,743	58,892	279,635				349,310
80.06 Legal/Fermita: Review Fees by other agencies, cities, etc.		33,111	8,834	41,945				52,397
80.07 Surveys, Testing, Investigation, Inspection		33,111	8,834	41,945				52,397
80.08 Start up		11,037	2,945	13,982				17,466
		77,269	20,612	97,882				122,259
Subtotal (10 - 80)		3,498,560	865,930	4,364,490	\$ 202,277		91%	4,873,201
90 UNALLOCATED CONTINGENCY								
Subtotal (10 - 90)				153,620			3%	184,186
100 FINANCE CHARGES								
Subtotal (10 - 100)				4,218,116	\$ 209,972		95%	5,657,387
Total Project Cost (10 - 100)				4,462,556	\$ 222,086	100%		5,347,681
Allocated Contingency as % of Base Yr Dollars w/o Contingency				27.07%				
Unallocated Contingency as % of Base Yr Dollars w/o Contingency				4.60%				
Total Contingency as % of Base Yr Dollars w/o Contingency				31.68%				
Unallocated Contingency as % of Subtotal (10 - 100)				3.78%				
VOE Construction Cost per Mile (X000)								\$180,812
VOE Total Project Cost per Mile (X000)								\$246,288
VOE Total Project Cost per Mile (X000)								\$266,137

PMOC MONTHLY REPORT

Honolulu High-Capacity Transit Corridor Project

City and County of Honolulu

Honolulu, HI

March 2011 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012

Task Order No. 2: Honolulu High-Capacity Corridor Project

Project No: DC-27-5140

Work Order No. 1

OPs Referenced: OP 1 and 25

Jacobs Engineering Group, Inc., 501 North Broadway, St. Louis, MO 63102

Tim Mantych, P.E., (314) 335-4454, tim.mantych@jacobs.com

Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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1.0 EXECUTIVE SUMMARY

1.1 Project Description

- **General Description:** The Project is an approximately-20-mile-long elevated fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College station. The Project is planned to be delivered in four guideway segments.
 - Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (6 miles/7 stations)
 - Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
 - Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
 - Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility (MSF) and parking facilities
- **Vehicles:** 76 vehicles
- **Ridership Forecast:** Weekday boardings – 97,500 (2019); 116,300 (2030).

1.2 Project Status

- Preliminary Engineering (PE) – The City has submitted substantial technical information related to its completion of PE activities, as identified in Appendix C (PE Status by Contract). The PMOC continues to review all items to determine the disposition of its assessment on the City's definition of the project scope through drawings, specifications, narratives, third party agreements, plans for the project delivery, etc, for adequacy and completeness at the completion of PE. The PMOC submitted a WORKING DRAFT of the Project Scope Review to FTA in January 2011. The PMOC anticipates completing the Project Scope Review in April 2011, pending a review of the selected Core Systems Contract (CSC) proposal, after it is made available.
- Program Management Consultant (PMC) – The City is negotiating Amendment #1 with InfraConsult LLC., the PMC, in the amount of approximately \$6 million for additional staffing that the City was unable to fill through direct hiring. This funding will cover eight positions (\$4.4 million) in addition to some subconsultants (\$1.6 million).
- General Engineering Consultant II (GEC) – The City has ranked Parsons Brinkerhoff as the top rated firm during procurement. Negotiations are underway, and NTP is anticipated to be issued in the latter part of April 2011. The City will issue another amendment for the GEC I contract that will extend contract through April 2011.
- West Oahu /Farrington Highway (WOFH) Design-Build (DB) Contract – NTP #1A, which was issued March 11, 2010, authorized \$25.8 million for PE activities to be completed. NTP #1B, which was issued March 23, 2010, authorized \$21.2 million for interim design activities. The City has indicated that NTP #1A and NTP #1B would

provide sufficient work for the contractor through approximately July 2010. NTP #1C, which was issued June 7, 2010, authorized \$3.5 million for test and demonstration drilled shafts to complete the deep foundations interim design. Work authorized under NTP #1C began on October 18, 2010 and is anticipated to be completed in March 2011. NTP #1D, which was issued January 6, 2011, authorized \$8.7 for continued administrative costs through June 2011 including project management, quality management, safety plan administration, coordination with local agencies, design management, and public information. NTP #2, which was issued March 3, 2011, authorized \$62 million for work activities related to the relocation of utilities based on the City's pre-award authority associated with the FTA's issuance of a ROD.

- Maintenance and Storage (MSF) DB Contract – The City issued a letter of intent to award the MSF contract to Kiewit/Kobayashi Joint Venture on June 24, 2010 in the amount of \$195 million. The price proposal expired on August 16, 2010, but the City sent a letter to Kiewit/Kobayashi requesting an extension of their pricing until March 15, 2011. The City issued a letter on February 9, 2011 to the contractor to confirm that they will accept a contract in the amount of \$195 million based on their price proposal that was submitted on June 24, 2010. The City received a response from Kiewit/Kobayashi in late February 2011. The contractor noted an exception to the milestones in the contract but did not specifically indicate concern with maintaining the proposal price. The City is in the process of responding to Kiewit/Kobayashi's issues. The City has indicated that NTP #1 will be issued in April 2011.
- Kamehameha Highway Guideway DB Contract – Technical and price proposals were received on October 7, 2010, with prices valid until April 5, 2011. Technical and price proposal evaluations were anticipated to be completed by the City on November 10, 2010. However, the City elected to request Best and Final Offers (BAFO) from the proposers. The first BAFO was received on December 30, 2010 and the second call for BAFO evaluation is in process and anticipated to be completed by the second week of March 2011. The City intends to make a selection by March 18, 2011 with NTP #1 anticipated to be issued in April 2011.
- Vehicles/Core Systems DBOM Contract (CSC) – The City issued a Request for BAFOs on November 4, 2010. BAFO responses were received on January 18, 2011. However, based on discussions held with the three Priority Listed Offerors, the City issued a 2nd call for BAFO's on February 9, 2011. Responses were received the week of February 21, 2011. The City anticipates issuing NTP #1 in April 2011.
- Station Design –
 - The City selected HDR/HPE, Inc. for the Farrington Station Group Design Contract. NTP #1A was issued on January 12, 2011 for \$120,000 to begin preparing the Schedule of Milestones and the Design Workshop. NTP #1B was issued for approximately \$1 million in February 2011 to begin advanced PE.
 - The RFQ to begin advanced PE for the Kamehameha Station Group Design Contract is expected to be released in March 2011.
 - The RFQ for the West Oahu Station Group was released January 13, 2010, with responses received on February 17, 2010. Due to the length of time that had elapsed between submittal of proposals and the potential date for selection (November 2010), the City allowed the proposers to "refresh" their proposals. Refreshed proposals were received in February 2011 and have been evaluated.

Selection is anticipated for March 2011 with NTP #1 anticipated to be issued in April 2011.

- Airport Guideway Segment Design Contract – The RFQ for design services was issued in January 2011 with responses due in March 2011. The City anticipates issuing an NTP in August 2011.
- Professional Real Estate Services Consultant – The RFP was canceled because of language in RFP Part I that prevented the City from developing a Priority-List. Re-solicitation is in process with modified language. The City anticipates completing the solicitation process in May 2011.
- Hawaii Department of Transportation (HDOT) – The City has begun procurement of two consultants to support HDOT: (1) Design review and construction inspection; and (2) Maintenance of Traffic (MOT) reviews. The City is negotiating with the top ranked firm, AECOM, for the design review and construction inspection contract and anticipates issuing an NTP in April 2011. The City will begin evaluating the Maintenance of Traffic (MOT) proposals once the first contract is executed.
- Owner Controlled Insurance Program (OCIP) Consultant – The City anticipates issuing RFP Part I in March 2011. RFP Part II is anticipated to be issued in May 2011. Selection is targeted to be completed in July 2011, with an NTP to be issued in August 2011.
- Programmatic Agreement (PA) Project Manager – The City anticipates issuing RFP Part I in late March 2011 for a PA Project Manager Consultant, or Kako'o. The City will submit RFP Part I to FTA and State Historic Preservation Division (SHPD) for review and approval in February 2011. Per the terms of the PA, the FTA and SHPD are required to review and approve (1) the procurement request for the Kako'o prior to the release of such request; (2) the qualifications of the final candidates under consideration by the City prior to the final selection of the Kako'o by the City; and (3) the scope of work of the Kako'o to be included in the City's contract with the Kako'o. The consultant will report to SHPD and the consulting parties listed in the PA.
- During the November 2010 election, an amendment to the Revised Charter of the City and County of Honolulu 1972 (as amended) was approved by voters to allow for the creation of a public transit authority. The new authority will be responsible for the planning, construction, operation, maintenance, and expansion of the City's fixed guideway mass transit system. This authority, which is to be named the Honolulu Authority for Rapid Transportation (HART), will become effective on July 1, 2011. Text of the full resolution can be found at the following link:

<http://www4.honolulu.gov/docushare/dsweb/Get/Document-95397/RES09-252,%20CD1.pdf>

The City has developed a flowchart that identifies key actions required along with their target dates for the creation of the new transit authority. This flowchart was transmitted to the FTA and PMOC on February 14, 2011.

(Note: Full details on the status of all contracts discussed above are provided in Appendix B.)

1.3 Technical Capacity and Capability

The table in Section 2.3 presents the status of key required management deliverables.

1.4 Schedule

- **Preliminary Engineering (PE):** FTA approved entrance into PE on October 16, 2009
- **Record of Decision:** Publication of the FEIS occurred on June 25, 2010. The comment period closed August 26, 2010. The City submitted its disposition of all comments to the FTA on October 4, 2010. The Record of Decision was issued on January 18, 2011.
- **Revenue Operations Date (ROD):** December 2019

1.5 Cost Data

The Project Budget submitted with the City's request to enter PE is as follows:

Base Cost Estimate	\$3.838 billion
Total Contingency	\$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	\$0.290 billion
Total Project Cost	\$5.348 billion

Additional project costs include the following:

Pre-PE Expenditures	\$0.082 billion
Financing Charges	\$0.103 billion (post-revenue operations)
Grand Total Project Cost	\$5.532 billion

Total Expenditures to Date \$0.155 billion (January 2011) (excludes pre-PE costs)

1.6 Issues or Concerns

The following key issues or concerns have been identified:

- The City must remain cognizant of the limits of the pre-award authority granted with the receipt of ROD. The City intends to issue multiple NTPs for its DB contracts. However, as noted in a December 1, 2009 letter to the City, the FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following issuance of the ROD.

The City submitted a White Paper to the FTA on January 6, 2011 regarding an approach it would like to consider for LONPs. This approach will be refined as the City continues preparations of its request to enter Final Design.

- The PMOC provided an over the shoulder review of a draft bottoms-up cost estimate with the City on November 2, 2010 during which the PMOC provided its opinions and verbal comments to the City. A bottoms-up cost estimate was provided to the PMOC on

January 5, 2011. However, after further discussions during the January 2011 Monthly Meeting, the City has determined that it will include the actual bid amounts for the Kamehameha Highway Guideway DB Contract and Core Systems DBOM Contract upon receipt of those bids. A revised bottoms-up cost estimate will be provided for review in March 2011. This information will be utilized for the Risk and Contingency Review, which is scheduled to begin with the first workshop April 6-8, 2011.

- The PMOC performed an over the shoulder review of the draft Master Program Schedule (MPS) on November 3, 2010 during which the PMOC provided its opinions and verbal comments to the City. The City submitted a revised MPS on January 7, 2010. The revised MPS (data date of December 31, 2010) and Basis of Schedule were reviewed by the PMOC. The PMOC identified several items that required correction in both the Basis of Schedule and MPS. The PMOC met with the City on February 8, 2011 to review these items. The City provided a revised MPS in March 2011. This schedule is under review by the PMOC. The City anticipates approval to enter Final Design in September 2011. This target is possible if the City meets the submittal dates for all outstanding items in the Final Design Roadmap, and if those items, including the City's Financial Plan, are found to be sufficient to enter Final Design by the FTA.
- The City must execute a license agreement with the Department of Hawaiian Homelands (DHHL) to construct the MSF on the Navy Drum Site. The License Agreement can now be executed since the ROD has been issued. The PMOC has recommended that the License Agreement be provided to the FTA and PMOC for review prior to execution.
- The System Safety and Security Program Standards (SSPPS) is an important part of HDOT's comprehensive safety and security assessment. Each of the rail fixed guideway systems covered under this Program (currently the Honolulu High Capacity Transit Corridor Project) is required to develop a System Safety Program Plan and System Security Program Plan that formalizes the safety and security duties and responsibilities of the transit organization and ensures a process for identifying and correcting safety and security hazards. The City will be assisting the State Oversight Agency (SOA) with procuring a consultant to develop the SSPPS by mid- 2011. It is the PMOC's professional opinion that the schedule to procure a consultant and for the consultant to develop the SSPPS could take up to a year. It is critical for the City and the SOA to begin the process immediately. The PMOC received a copy of the SOA's draft program schedule on December 3, 2010. A new Director of Transportation for HDOT has been appointed and has identified a new SOA lead. The draft program schedule was aggressive. It is the PMOC's professional opinion that a revised program schedule will need to be developed once the new SOA representative assumes responsibilities for establishing the SSPPS.

2.0 BODY OF REPORT

2.1 Grantee's Capabilities and Approach

2.1.1 Technical Capacity and Capability

The PMOC had previously identified "capacity" issues as key City and Project Management Consultant (PMC) positions remained vacant or vacated due to retention challenges stemming from the project's geographic location and other related issues. The PE Entry Readiness Report identified the following key positions that the City needed to focus on filling prior to ROD:

- Chief Project Officer – filled by PMC
- Manager of Quality Assurance – filled by PMC
- Manager of Safety and Security – filled by PMC
- Manager of Real Estate – filled by City
- Chief Project Controls – filled by PMC
- Contracts Administrator – filled by City

Some of the key positions have been filled by the PMC due to staffing challenges stemming from the project's geographic location, limited salary structure, or lack of qualified candidates. Although there is no set timetable for replacing the PMC with City staff, the City has developed a Staffing Plan and has begun to advertise city positions currently filled by the PMC. The need for PMC staff will diminish as the City fills key management positions. Until such time, it will be necessary for the City to continue supplementing its staff with PMC staff. It is the PMOC's professional opinion that a five-year timetable from the approval to enter PE in October 2009 is needed to provide enough lead time to perform the recruitment, selection and training for replacing the PMC with City staff. The PMOC believes that the resource demands associated with the PE and Final Design phases of a \$5 billion project require full time and concentrated attention and continuity within the Grantee's organization for smooth transition into future phases.

The City has made an improvement in hiring additional staff needed for the project since the PE Entry Readiness Report. However, more hiring is needed to accomplish the required staffing levels anticipated by the City. The City has 128 positions budgeted for FY 2012, including all current positions. Of the 128 positions budgeted, the City has currently filled 41 full time positions with another 13 full time positions that are to be filled by the 2nd Quarter of 2011. It is expected that the transition from current to proposed staff size and composition would occur over the years of 2011 to 2013. It is anticipated that the 2013 staffing pattern would then remain applicable for several years thereafter. The PMC currently has filled 25 positions and they are in the process of negotiating Amendment #1 for additional PMC staffing hired for critical positions the City was unable to fill. The critical positions that have been filled or are to be filled by the PMC are as follows:

- Senior Cost Analyst – filled by PMC
- Assistant Project Officer Utility, Agency & Permit Coordination – filled by PMC
- Manager of Rail Communications – filled by PMC
- Deputy Director of Project Finance – To be determined

The City is actively recruiting the following staff (target start date in parentheses):

- Mechanical Engineer III (2nd Quarter 2011)
- Utilities Engineer (2nd Quarter 2011)
- Contract Change Specialist (2nd Quarter 2011)
- Civil Engineer VI (KHG) (2nd Quarter 2011)
- Secretary I (CSC) (2nd Quarter 2011)
- Planner VI (Financial) (2nd Quarter 2011)
- Planner III (2nd Quarter 2011)
- Accountant IV (2nd Quarter 2011)
- Two Information Technology Support Technicians (2nd Quarter 2011)
- Labor Relations Specialist (2nd Quarter 2011)
- Senior Clerk (2nd Quarter 2011)
- Human Resource Specialist (2nd Quarter 2011)

The City has recently added the following staff (start date in parentheses):

- Electrical Engineer IV (February 2011)
- Civil Engineer III (February 2011)
- Mechanical Engineer III (February 2011)
- Secretary II (February 2011)
- Data Processing System Analyst (February 2011)
- Deputy Project Officer (February 2011)

The PMC is actively recruiting the following staff (start date in parentheses):

- Transit Arts Coordinator (TBD)
- Interim Utility Coordinator (TBD)

The City also issued an RFP for Real Estate Professional Services on November 17, 2010 and selection is anticipated by April 2011, which will enhance the Technical Capacity and Capability of the Manager of Real Estate.

The PMOC is in the process of completing a Technical Capacity and Capability (TCC) review of the project staff for entry into FD. The following personnel have been interviewed:

- Deputy Project Officer Controls & Administration – Frank Doyle (City)
- Assistant Project Officer Design-Build Contracts – Lorenzo Garrido (PMC)
- Assistant Project Officer Facilities – In-Tae Lee (City)
- Safety and Security Manager – Kahlil Allen (PMC)
- Quality Manager – Alberto Bonifacio (PMC)
- Manager of Rail Communications – Jeannie Mariani-Belding (PMC)
- Assistant Project Officer Design-Bid-Build Contracts – Richard Torres (City)
- Assistant Project Officer Utility, Agency & Permit Coordination – Vicki Barron-Sumann (PMC)
- Manager of Project Controls – Mark Hickson (PMC)

It is the PMOC's professional opinion that the Project organization, staffing, and management approach provides the technical capability to support the City's initial implementation of the

project during PE. However, the PMOC has recommended that the City identify additional key positions (other than those identified in the PE Entry Readiness Report and listed above) that should be filled by City employees. The City has identified the Project Labor Agreement Specialist and Procurement Specialists as critical positions that need to be filled by the City. Both positions remain vacant. The City feels confident that they can fill these critical positions. However, if they have problems filling these critical positions, the PMC will be asked to fill them.

2.1.2 Transit Authority

During the November 2010 election, an amendment to the Revised Charter of the City and County of Honolulu 1972 (as amended) was approved by voters to allow for the creation of a public transit authority. The new authority will be responsible for the planning, construction, operation, maintenance, and expansion of the City's fixed guideway mass transit system. This authority, which is to be named the Honolulu Authority for Rapid Transportation (HART), will become effective on July 1, 2011. As a result of the election, the City has begun taking measures to fill the positions necessary to not only implement this Project but establish a new transit authority.

The City has indicated that the next update of the PMP, which is anticipated to be submitted for final review in March 2011, will support its request to enter Final Design but will only address the new transit authority in general terms. The city will require additional time to fully vet the impacts of a new authority on its staff and management approach. It is anticipated that an update to the PMP will be submitted after July 1, 2011 that will address the new transit authority in detail. Text of the full resolution can be found at the following link:

<http://www4.honolulu.gov/docushare/dsweb/Get/Document-95397/RES09-252,%20CD1.pdf>

The City has developed a flowchart that identifies key actions required along with their target dates for the creation of the new transit authority. This flowchart was transmitted to the FTA and PMOC on February 14, 2011.

2.1.3 Project Office

The City reached an agreement for a 10-year lease on the 23rd floor of its building on December 1, 2010, which will provide for an additional 17,000 square feet of office space to the existing 18,000 square feet of office space on the 17th floor. The City, PMC, and a portion of the GEC staff will continue to be co-located and will utilize the additional office space. Some project staff moved into this new office space in early January 2011. The 23rd floor provides enough space for approximately 65 personnel. It is the PMOC's professional opinion that the additional floor will provide sufficient space too effectively and efficiently progress the project during the Final Design phase of the project. However, additional office space may be needed with the creation of a new public transit authority and as the project advances into full construction and start-up due to the staffing expectations for the project.

2.1.4 Project Controls for Scope, Quality, Schedule, Cost, Risk and Safety

System Safety and Security

- The State of Hawaii has established Executive Order No. 10-05 effective April 6, 2010, designating the State Department of Transportation (HDOT) as the State of Hawaii Rail Fixed Guideway Oversight Agency.
- Revision 2.0 of the Safety and Security Management Plan (SSMP) and Revision 0 of the Safety and Security Certification Plan (SSCP) were submitted to the PMOC for review on April 5, 2010. The PMOC reviewed and provided comments to the City on April 28, 2010. A conference call was held with the City on May 14, 2010 to provide it with further clarification of the PMOC's comments. The intent of the PMOC comments was to assist the City with updating the documents prior to Final Design. The FINAL DRAFT of Revision 2.0 of the SSMP was submitted to the PMOC for review in January 2011. The PMOC provided the City with extensive comments on the FINAL DRAFT. An update of the SSCP is anticipated in April 2011. The City and the PMOC have scheduled a meeting for the week of April 11, 2011 to discuss safety and security issues, including the update of these two documents.
- The PMOC intends to hold a safety and security workshop that could include representatives from FTA Region IX, FTA Headquarters, and HDOT. The tentative timeframe for the workshop is Summer 2011.
- The System Safety and Security Program Standards (SSPPS) are an important part of HDOT's comprehensive safety and security assessment. Each of the rail fixed guideway systems covered under this program (currently the Honolulu High Capacity Transit Corridor Project) is required to develop a System Safety Program Plan and System Security Program Plan that formalizes the safety and security duties and responsibilities of the transit organization and ensures a process for identifying and correcting safety and security hazards. The City will be assisting the State Oversight Agency (SOA) with procuring a consultant to develop the SSPPS by mid- 2011. It is the PMOC's professional opinion that the schedule to procure a consultant and for the consultant to develop the SSPPS could take up to a year. It is critical for the City and the SOA to begin the process immediately. The PMOC received a copy of the SOA's draft program schedule on December 3, 2010. A new Director of Transportation for HDOT has been appointed and has identified a new SOA lead. The draft program schedule was aggressive. It is the PMOC's professional opinion that a revised program schedule will need to be developed once the new SOA representative assumes responsibilities for establishing the SSPPS.

Quality

- The City performed a Quality Audit of the GEC I PE products from November 17-19, 2010. The City's QA Manager issued the results of the QA Audit to the General Manager and GEC I on December 2, 2010. The QA audit produced one Non-Conformance Report (NCR) for Design Control Procedures and three observations for Document Control/QA Records, Computer Program Verification and Certifications and

Non-Conformances. The GEC I consultant has performed a majority of the early PE design for the DB, DBOM and DBB contracts that the City has issued for bid or are in the process of issuing for bid. The PMOC had strongly recommended that the project Quality Assurance Manager perform a Quality Audit before the City issues NTP for the GEC II contract to identify any potential issues. The GEC responded to the report on December 10, 2010 and the City has verified that the corrective and preventive actions were in place. Audit close-out is scheduled for April 2011.

2.1.5 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements

National Environmental Policy Act (NEPA)

- The ROD was issued on January 18, 2011.
- The WOFH Segment DB Contract will utilize an existing facility for precasting and prestressing the concrete guideway segments. The casting facility, located in Campbell Industrial Park, is approximately 27 acres and is in close proximity to the WOFH project. GPRM Prestress is a certified plant under the PCI (Precast/Prestressed Concrete Institute) Certification Program.
- A lawsuit was filed against the Project in January 2011. The lawsuit, filed by the Native Hawaiian Legal Corporation, alleges that government officials and agencies circumvented the procedures to identify and protect Native Hawaiian burial sites.

Letters of No Prejudice (LONP)

- In a December 1, 2009 letter to the City, the FTA clarified its policies and procedures related to LONPs. The letter states, "After completion of NEPA, FTA will consider LONPs for activities not covered by automatic pre-award authority on a case by case basis. Absent of pre-award authority or an LONP, no project cost can be incurred and be eligible for reimbursement or as local matching for any portion of the entire 20 mile alignment." The City submitted a White Paper to FTA on January 6, 2011 regarding an approach it would like to consider for LONPs. This approach will be refined as the City continues preparations of its request to enter Final Design.

The City anticipates submitting a Pre-FD LONP request for the WOFH contract only by April 2011. The value of the LONP request will be approximately \$5 million. If this Pre-FD LONP request is approved by FTA, it will allow the WOFH contractor to submit FD drawings to the City's Department of Planning and Permitting for permit approval. The City has indicated that the Department of Permit and Planning typically takes greater than 120 days to review and approve permits. The justification, cost and schedule will be provided by the City in the Pre-FD LONP request.

The most critical LONP will be for the WOFH DB Project. The City anticipates that Kiewit will complete all work authorized under NTP #1, 1A, 1B & 1C in May 2011. The City issued NTP #2 on March 3, 2011 for utility relocations since the ROD was issued. However, Kiewit's approved schedule identified construction starting in fall of 2010. The City now anticipates requesting an LONP for construction activity to begin in the fall of 2011. Based on the LONP checklist the City will need an updated cost estimate, updated schedule, Risk Assessment, Risk and Contingency Management Plan, and

Financial Management Plan before an LONP could be considered by the FTA. The FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following completion of the NEPA process.

2.2 Project Scope

The Project is a 20-mile fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which currently includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College Station. The Project is planned to be delivered in four guideway segments.

- Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (6 miles/7 stations)
- Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
- Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
- Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)

The alignment will average a total of 97,500 weekday boardings at the Revenue Operations Date in the year 2019 and 116,300 weekday boardings in the year 2030. It will provide two significant areas with potential for Transit Oriented Development, one near the Airport and one in the surrounding industrial areas. It is anticipated that the initial fleet will include 76 "light metro" rail vehicles.

2.2.1 Status of Design/Construction Documents

The City has submitted substantial technical information related to its completion of PE activities, as identified in Appendix C (PE Status by Contract). The PMOC continues to review all items to determine the disposition of its assessment on the City's definition of the project scope through drawings, specifications, narratives, third party agreements, plans for the project delivery, etc, for adequacy and completeness at the completion of PE. The PMOC submitted a WORKING DRAFT of the Project Scope Review to FTA in January 2011. The PMOC anticipates completing the Project Scope Review in April 2011, pending a review of the selected Core Systems Contract (CSC) proposal, after it is made available.

The City held a Value Engineering Workshop the week of April 19-23, 2010, which the PMOC attended as an observer. The focus of the workshop was originally to include the Airport Segment Guideway and Utilities, City Center Segment Guideway and Utilities, and station packages. However, the City has subsequently determined that the workshop would focus only on the station packages. The objective of the VE workshop was to provide value engineering for six stations along the alignment – West Loch, Pearl Highlands, Aloha Stadium, Kalihi, Downtown, and Ala Moana Stations, representing elevated stations with and without concourses, direct access stations, and unique stations. As part of VE, the team was expected to consider not just ways of cutting costs, but also ways to reduce project risks, enhance operations, and bring to light any improvement opportunities that may exist.

Through the DB procurement, the City allows for submittal of Alternate Technical Concepts for the contractors, which satisfies the Value Engineering requirement during PE for the design-build contracts.

The City has scheduled a VE Workshop for the Airport and City Center Guideway and Utility Relocation packages from April 11-15, 2011. Although, the PMOC will have completed the Project Scope Review by the time this VE workshop is held, the PMOC will include any critical observations from a review of the VE report in the PMOC Final Design Readiness Report. The PMOC will attend the VE Workshop as an observer. The PMOC will monitor that all VE recommendations are reviewed by the City and that those that are accepted are implemented accordingly.

The final VE Report for Stations and the Alternative Technical Concepts (ATC) Report from the DB proposals were provided to the PMOC in October 2010. This included a list of the VE recommendations that the City intends to implement. The PMOC has reviewed the final VE report to ensure that the purpose and objectives were met, the findings were adequately summarized, and an action plan was developed. The table below presents the summary of VE results provided by the City.

Source	No. of Proposals Received	Estimated Value (M)	No. of Proposals Accepted	Estimated Value (M)
VE Workshop for Stations	30	\$318.5	26	\$104.1
ATC Proposals – WOFH DB Contract	29	\$85.4	13	\$60.5
ATC Proposals – KH DB Contract	16	\$29.0	7	\$18.3
ATC Proposals – MSF DB Contract	11	\$16.1	5	\$2.7
ATC Proposals – CSC DBOM Contract	41	\$35.6	15	\$15.5
TOTAL	127	\$484.6	66	\$201.1

2.2.2 Status of Third-Party Agreements

The following table provides the status of Third Party Agreements for the project:

Agreement	Completion Date	Segment/ Contract	Status
University of Hawaii Master Agreement	Pending	I, II	UH Reviewing
Leeward Community College Sub-agreement	Pending	I	UH Reviewing
Department of Education Master Agreement (Waipahu High School)	Pending	I	Awaiting City Council approval.
Department of Education Consent to Construct	Pending	I	DOE Reviewing
DHHL Master Agreement (Drum Site)	10-Mar-10	I/MSF	Executed
Department of Land and Natural Resources (DLNR) Executive Order Request for WOFH	Pending	I	Request sent to DLNR but agency will not review until after ROD
Department of Land and Natural Resources Consent to Construct for WOFH	Pending	I	Request sent to DLNR but agency will not review until after ROD
Easement Request for Navy Property	Pending	MSF	Navy is processing request
HDOT Master Agreement – Segment I	Pending	I	Joint Use and occupancy agreement can now be executed since ROD has been issued.
Department of Hawaiian Homelands (DHHL) License Agreement	Pending	I/MSF	Under review by DHHL
General Services Administration (GSA) Agreement	Pending	III,IV	Pending
Hawaii Community Development Authority (HCDA) Agreement	Pending	IV	Pending

The following table provides a summary and status of the Utilities Engineering Services Agreements for the Project:

Utility	West Oahu/Farrington Highway DB Contract	Kamehameha Highway DB Contract
AT&T Corporation	Purchasing waiting for outstanding certificates from utility	Engineering cost requested
Chevron Products Company	Complete	Engineering cost requested
Hawaiian Telcom, Inc.	Complete	Engineering cost requested
Hawaiian Electric Company, Inc	Compensation through agreement with GEC	Cost Received from utility
Oceanic Time Warner Cable	Complete	Engineering cost requested
Pacific LightNet Inc.	Complete	Engineering cost requested
Sandwich Isle Communications Inc.	Complete	Engineering cost requested
The Gas Company	Complete	Cost Received from utility
TW Telecom	Complete	Cost Received from utility
Tesoro Hawaiian Corporation	Request cancelled since utility has no impacts on this contract	Engineering cost requested

2.2.3 Delivery Method

Appendix B provides the status of the various design and construction contracts associated with this Project. The following is a list of contracts, delivery methods and contract packages anticipated for the project (number in parentheses indicates number of anticipated contracts if more than one):

- Professional Services

- Project Management Consultant (PMC)
- General Engineering Consultant (GEC)
- Legal Services
- Leadership in Energy and Environmental Design (LEED) Commissioning
- Insurance Consulting for Owner Controlled Insurance Program
- Drilled Shaft Load Testing
- Real estate support consultant
- Design and Construction Services
 - Guideway & Utilities Design (2)
 - Stations Design (7)
 - Design-bid-build (DBB) Construction Engineering Inspection (5-7)
- Construction and Procurement Contracts
 - 3 Design-Build Contracts – Guideway (2) and MSF
 - Design-Bid-Build Contracts
 - Stations (7)
 - Utility Relocation (2)
 - Guideway Construction (2)
 - System-wide Landscaping
 - Vehicle/Core Systems Design-Build-Operate-Maintain (DBOM)
 - Elevator/Escalator

In accordance with the Contract Packaging Plan developed by the City, construction of the project guideway is to be implemented in four segments. A summary of the Contract Packaging Plan for PE is currently included in the PMP as the project delivery approach for the Project. The method of delivery for the four guideway segments is as follows:

- Segment I – East Kapolei to Pearl Highlands – DB
- Segment II – Pearl Highlands to Aloha Stadium – DB
- Segment III – Aloha Stadium to Middle Street Station – DBB
- Segment IV – Middle Street Station to Ala Moana Center – DBB

The DB approach is being planned to advance the project schedule in order to minimize escalation costs and start construction of the initial portion of the project while the remainder of the project proceeds through the DBB process. Work on these early contracts (Segments I & II, Maintenance and Storage Facility and Core Systems) is planned to be initiated ahead of the FFGA utilizing excise tax funding. However, as noted above, any design activities beyond PE or construction activities not covered by automatic pre-award authority would require an LONP, which would be considered on a case-by-case basis.

2.2.4 Vehicle Status

Vehicle procurement is included in the Core Systems DBOM Contract, the status of which is discussed in Appendix B.

The current assumptions for the vehicles include a total active rail car fleet of 76 “light metro” railcars. The railcar being proposed is an automated light metro car, similar to railcars currently

in operation in Vancouver, Copenhagen, and Oslo, but not in the United States. The railcar would have three doors per side and a length of approximately 60 feet. Vehicles could run in two-, three-, or four-railcar trains. Following is a summary of the anticipated vehicle characteristics (subject to change based on proposals that will be received from DBOM contractors):

- 76 light metro vehicles (identified as heavy rail in SCC workbook)
- Standard gauge, steel wheel on steel rail
- Fully automated, manual operation possible (hostler panel)
- Nominal vehicle dimensions:
 - Length: 60 feet
 - Width: 10 feet
 - Height: Up to 13.3 feet
 - Floor Height: 3.77 feet above top of rail (at entry)
- Nominal Passenger Capacity: 190 per vehicle (AW2 load)
- Electric traction via third rail, nominal 750V direct current supply, all axles powered
- Semi-permanently coupled, bi-directional trainsets
- Wide gangways between end and middle cars
- 2 to 3 double passenger plug doors per side (per car)
- Manual crew doors with steps
- Dynamic / regenerative braking
- Alternating current propulsion
- 30+ year design life

2.3 Project Management Plan and Sub-Plans

The following table presents the status of each City-provided management deliverable. The “Date of Current Revision” column indicate management deliverables that have been prepared prior to or during PE per the requirement of the PE approval letter. The “Anticipated Date for Next DRAFT Submission” indicates the target date for submission of a DRAFT update of each deliverable to the PMOC for review. The “Anticipated Date for Final Document to Support FD Request” indicates the target date for submission of a final document, with no additional changes expected prior to approval to enter Final Design.

Management Deliverable	Current Revision No.	Date of Current Revision	Date for DRAFT Submission (Anticipated Date)	Date for Final Document to Support FD Request (Anticipated Date)	Notes
Project Management Plan (PMP)	4	10-Dec-10	(1-Apr-11)	(15-Apr-11)	City is in the process of updating the PMP based on PMOC comments
Quality Management Plan (QMP)	0	01-Jan-11	N/A	N/A	Document finalized
Real Estate Acquisition and Management Plan (RAMP)	4	21-Dec-10	N/A	N/A	Document finalized
Bus Fleet Management Plan (BFMP)	2	Jun-10	N/A	(May-11)	BFMP will be finalized based on data from Financial Plan
Rail Fleet Management Plan (RFMP)	0	Apr-09	(Apr-11)	(May-11)	Update will be based on information from Core Systems Contractor
Safety and Security Management Plan (SSMP)	2	01-Apr-10	11-Jan-11	(Apr-11)	PMOC provided review comments
Safety and Security Certification Plan (SSCP)	1	Feb-10	(25-Feb-11)	(Apr-11)	Review comments for Rev 0 provided 28-Apr-10
Configuration Management Plan (CMP)	0	23-Dec-10	N/A	N/A	Document finalized
Staffing Plan	0	16-Nov-10	Mar-11	(15-Apr-11)	City to incorporate staffing positions filled since the previous update

2.4 Project Schedule Status

The PMOC performed an over the shoulder review of the draft Master Program Schedule (MPS) on November 3, 2010 during which the PMOC provided its opinions and verbal comments to the City. The City submitted a revised MPS on January 7, 2010. The revised MPS (data date of December 31, 2010) and Basis of Schedule were reviewed by the PMOC. The PMOC identified several items that required correction in both the Basis of Schedule and MPS. The PMOC met with the City on February 8, 2011 to review these items. The City provided a revised MPS in March 2011. This schedule is under review by the PMOC. The City anticipates approval to enter Final Design in September 2011. This target is possible if the City meets the submittal dates for all outstanding items in the Final Design Roadmap, and those items, including the City's Financial Plan, are found to be sufficient to enter Final Design by the FTA.

The table below provides a comparison of key milestone dates at the start of PE and in the current MPS.

Activity ID	Delivery Method	Milestone Description	Finish Date		Variance (Days)
			PE Entry Baseline	MPS (Data Date 31-Jan-11)	
D250	N/A	FTA Approve Entry into Final Design	10-Aug-10	03-Sep-11	(389)
F270	N/A	FTA Award Full Funding Grant Agreement	11-Sep-10	30-Sep-12	(750)
I997	DB	Open Waipahu to Leeward Section	14-Dec-12	N/A*	N/A*
M999	DB	MSF Complete	01-Oct-13	28-May-14	(239)
I998	DB	Open East Kapolei to Leeward CC Section	31-Jul-14	N/A*	N/A*
I999	DB	Open Leeward CC -- Pearl Highlands Section	27-Apr-15	N/A*	N/A*
J999	DB	Open Kamehameha Section	14-Sep-16	14-Oct-15	336
Z999	DBB	Open Airport Section	31-Oct-17	24-Oct-17	7
9999	DBB	Open to Ala Moana Center *** (ROD) ***	03-Mar-19	04-Mar-19	(1)

* N/A since there has been a reduction from six (6) phased openings to three (3).

The following is a 90-day look ahead for important activities associated with the Project:

Period: April 2011 – June 2011		
Activity	Responsibility	Date
Monthly Progress Meeting	City, PMC, GEC and PMOC	April 5, 2011
Risk Assessment Workshop #1	City, PMC, GEC and PMOC	April 6-8, 2011
VE Guideway Workshop	City, PMC, GEC and PMOC	April 11-15, 2011
Safety and Security Meeting	PMC, GEC and PMOC	April 11-14, 2011
Risk Assessment Workshop #2	City, PMC, GEC and PMOC	April 26-28, 2011
Monthly Progress Meeting	City, PMC, GEC and PMOC	May 11, 2011 (tentative)

2.5 Project Cost Status

The Project Budget submitted with the City's request to enter PE is as follows:

Base Cost Estimate	\$3.838 billion
Total Contingency	\$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	\$0.290 billion
Total Project Cost	\$5.348 billion

Additional project costs include the following:

Pre-PE Expenditures	\$0.082 billion
Financing Charges	\$0.103 billion (post-revenue operations)
Grand Total Project Cost	\$5.532 billion

Total Expenditures to Date \$0.155 billion (January 2011) (excludes pre-PE costs)

The PMOC provided an over the shoulder review of a draft bottoms-up cost estimate with the City on November 2, 2010 during which the PMOC provided its opinions and verbal comments to the City. A bottoms-up cost estimate was provided to the PMOC on January 5, 2011. However, after further discussions during the January 2011 Monthly Meeting, the City has determined that it will include the actual bid amounts for the Kamehameha Highway Guideway DB Contract and Core Systems DBOM Contract upon receipt of those bids. A revised bottoms-

up cost estimate will be provided for review in March 2011. This information will be utilized for the Risk and Contingency Review, which is scheduled to begin with the first workshop April 6-8, 2011.

2.5.1 Standard Cost Category (SCC)

The SCC Workbook, including Main and Inflation worksheets, is submitted as a separate electronic file. However, the City is in the process of updating its detailed bottoms-up estimate.

2.5.2 Funding Sources

The following are the project capital revenue (funding) sources provided by the City during the January 2011 Progress Meeting:

General Excise Tax (GET)	\$3.698 billion
Section 5309	\$1.550 billion
Section 5307	\$0.300 billion
ARRA (Section 5307)	\$0.004 billion
Interest	\$0.011 billion
Total	\$5.563 billion

The GET surcharge receipts received to date are approximately \$620.6 million.

The City is hopeful that it will be able to reduce the need for Section 5307 funds through project development (.i.e. refined Base Cost Estimate and revenue estimates during PE) and an aggressive bidding environment.

2.6 Project Risk

The PMOC completed a scope, schedule, and cost review in advance of completing a risk review of the Project as part of the evaluation of the Grantee's request to enter PE. A Final Spot Report was submitted in July 2009. The Spot Report included recommendations for cost and schedule contingency and identified key risks. However, this effort did not include development of risk management tools (e.g., Primary Mitigation Deliverables, Secondary Mitigation Activities, or a Risk and Contingency Management Plan). These risk management tools will be developed in conjunction with an update of the risk assessment to support the City's request to enter Final Design.

The PMOC received the GEC Risk Register on October 27, 2010. PMOC comments on the risk register were discussed on December 7, 2010. The City submitted the GEC Risk Report to FTA/PMOC on January 6, 2011. The PMOC appreciates the City being proactive and performing its own Risk Assessment, and the PMOC will be able to utilize much of the information provided by the City. However, the PMOC will perform a thorough evaluation of all aspects of the Project technical capacity and capability, scope, schedule, and cost when preparing for the fully independent FTA Risk Review. The following table presents the dates for all key activities or deliverables associated with completion of the Risk Review. It should be

noted that this is a subset of the Final Design Roadmap and does not include all activities necessary to enter Final Design.

Activity/Deliverable	Responsible Party	Original Target Date	Current Target Date	Note
Basis of Schedule	City	18-Jan-11	09-Mar-11	Complete
KHG DB Contract Proposal	City	31-Jan-11	10-Mar-11	
CSC DBOM Contract Proposal	City	08-Feb-11	10-Mar-11	
Updated Cost Estimate	City	25-Feb-11	18-Mar-11	
Updated Basis of Cost Estimate	City	25-Feb-11	18-Mar-11	
Escalation Model	City	04-Mar-11	25-Mar-11	
SCC Workbook	City	04-Mar-11	25-Mar-11	Updated SCC Workbook is necessary to prepare risk model in advance of Workshop #1
Financial Plan (DRAFT)	City	18-Mar-11	08-Apr-11	DRAFT plan will be submitted but cannot be finalized until after Workshop #2
Workshop #1	PMOC	22-Mar-11	06-Apr-11	
Preliminary results submitted to FTA	PMOC	01-Apr-11	15-Apr-11	PMOC will prepare draft findings and submit to FTA for review and concurrence prior to Workshop #2
Workshop #2	PMOC	19-Apr-11	26-Apr-11	PMOC to present results to City

2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Schedule Safety and Security Workshop	FTA/PMOC	4-Nov-09	Jun-11		Open
2	City to coordinate meeting with PMOC and State Oversight Agency	City	Jul-10	Apr-11		Open
3	Provide Sample FFGA Roadmap	PMOC	Oct-10	Feb-11		Open
4	Provide PMOC with Real Estate Professional Services Request For Proposal Part 2	City	Oct-10	Feb-11		Open
5	Provide example of environmental reporting	PMOC	Dec-10	Feb-11		Open
6	Include cash flow curve in monthly presentation and monthly report	City	Mar-11	Mar-11		Open
7	Provide updated organization chart with affiliation and names	City	Feb-11	Feb-11		Open
8	Include a matrix of budgeted versus actual staff positions for the City and PMC in monthly presentation and monthly report	City	Mar-11	Mar-11		Open
9	Provide revised staffing plan	City	Mar-11	Mar-11		Open
10	Perform onsite review of PMP and QMP activities	PMOC	Mar-11	Jun-11		Open
11	Provide SOA meeting minutes and organization chart	City	Mar-11	Mar-11		Open
12	Provide schedule for station workshops	City	Mar-11	Mar-11		Open

APPENDICES

Appendix A: Acronym List

ATC	▪ Alternative Technical Concept
BAFO	▪ Best and Final Offers
BFMP	▪ Bus Fleet Management Plan
CSC	▪ Core Systems Contract
DB	▪ Design-Build
DBB	▪ Design-Bid-Build
DBOM	▪ Design-Build-Operate-Maintain
DHHL	▪ Department of Hawaiian Homelands
FD	▪ Final Design
FEIS	▪ Final Environmental Impact Statement
FFGA	▪ Full Funding Grant Agreement
FONSI	▪ Finding of No Significant Impact
FTA	▪ Federal Transit Administration
FY	▪ Fiscal Year
GEC	▪ General Engineering Consultant
GET	▪ General Excise Tax
HAR	▪ Hawaii Administrative Rules on Procurement
HDOT	▪ Hawaii Department of Transportation
HHCTC	▪ Honolulu High Capacity Transit Corridor Project
LCC	▪ Leeward Community College
LEED	▪ Leadership in Energy and Environmental Design (LEED)
LONP	▪ Letter of No Prejudice
MSF	▪ Maintenance and Storage Facility
NEPA	▪ National Environmental Policy Act
NOA	▪ Notice of Availability
NTP	▪ Notice to Proceed
PA	▪ Programmatic Agreement
PE	▪ Preliminary Engineering
PMOC	▪ Project Management Oversight Contractor
PMP	▪ Project Management Plan
PMC	▪ Project Management Consultant
QMP	▪ Quality Management Plan
RA	▪ Risk Assessment
RAMP	▪ Real Estate Acquisition and Management Plan
RFMP	▪ Rail Fleet Management Plan
RFP	▪ Request for Proposals
RFQ	▪ Request for Qualifications
ROD	▪ Record of Decision
ROD	▪ Revenue Operation Date
RPZ	▪ Runway Protection Zone
SOA	▪ State Oversight Agency
SSCP	▪ Safety and Security Certification Plan
SSEPP	▪ System Security and Emergency Preparedness Plan
SHPO	▪ State Historic Preservation Office
SSMP	▪ Safety and Security Management Plan
SSPP	▪ System Safety Program Plan
VE	▪ Value Engineering
WOFH	▪ West Oahu/Farrington Highway
YOE	▪ Year of Expenditure

Appendix B: Contract Status

The following sections provide the scope and status of the various contracts identified for this Project.

Project Management Consultant (PMC) Contract.

- Scope – The consultant will serve as a program manager in providing oversight of the PE, FD, and construction activities for all DB and DBB contracts.
- Status – The City awarded a contract to InfraConsult LLC in November 2009 to provide Project Management Support Services. The PMC Agreement is for five years with a Not-to-Exceed amount of \$36.7 million. The PMC is negotiating Amendment #1 for approximately \$6 million for additional staffing hired by the PMC that the City was unable to fill through direct hiring.

General Engineering Consultant (GEC I) Contract

- Scope – The City has contracted with Parsons Brinkerhoff (PB) to serve as the GEC in completing PE/EIS efforts for the Project. The scope of work for this contract includes PE for all Project components. For those items that will be constructed utilizing Design-Build (DB) methodology, the GEC was required to prepare contract documents that would be included in a two-step Best Value procurement package.
- Status – The City issued a NTP for the GEC I contract on August 27, 2007. The period of performance of the contract was August 2007 to March 2010. Six contract amendments have been issued extending the period of performance to February 25, 2011 and authorizing total budget of \$144 million. The City is in the process of issuing a seventh contract amendment for approximately \$12 million that extends through April, 2011 to provide the City with sufficient time to complete GEC II negotiations and issue NTP #1. The pre-PE costs for the GEC I contract were approximately \$88.6 million.

General Engineering Consultant (GEC II) Contract

- Scope – The consultant will provide services related to elevated guideway engineering, systems engineering, rail station design, construction management oversight, procurement, contract administration, configuration control, claims support, scheduling, project financing and environmental planning. After the qualifications are evaluated and the top qualifier is selected, the City will develop the detailed scope of the contract. The GEC II Contract will include a ten year period of performance. The City expects to hire separate Construction Engineering and Inspection firms to provide field services for the DBB contracts.
- Status – The City has ranked Parsons Brinkerhoff as the top rated firm during the procurement. Negotiations are underway, and NTP is anticipated to be issued in the latter part of April 2011.

Hawaii Department of Transportation (HDOT) Consultant

- Scope – HDOT does not have the staff necessary to complete reviews of DB plans, Maintenance of Traffic (MOT) and perform the necessary construction inspection of the four guideway segments. Since most of the guideway will be located along HDOT right-of-way, it is necessary for HDOT to perform permit reviews of the DB plans and perform

the final inspections. Therefore, the City has begun procurement of two contracts on HDOT's behalf for consultants to support HDOT with design review and construction inspection and one for MOT review. HDOT will manage the selected firms, but all related consultant costs will be paid from the project budget.

- Status – The City has included the costs of the HDOT reviews in the original project budget. The City is negotiating with the top ranked firm, AECOM, for the design review and construction inspection contract and anticipates issuing an NTP in April 2011. The City will begin evaluating the Maintenance of Traffic (MOT) proposals once the first contract is executed.

Profession Real Estate Services Consultant

- Scope – Support project real estate staff with acquisition, relocation and property management.
- Status – The City issued RFP Part 1 on November 17, 2010. However, the RFP was canceled because of language in RFP Part I that prevented the City from developing a Priority List. Re-solicitation is in process with modified language. The City anticipates completing the solicitation process in May 2011.
- Issues or Concerns – It is the PMOC's professional opinion that this approach should provide the technical capacity to support the City's Right of Way (ROW) activities.

Owner Controlled Insurance Program (OCIP)

- Status – The City anticipates issuing an RFP for an Owner Controlled Insurance Program (OCIP). The city anticipates a two-step RFP process beginning in mid-February 2011 following completion of a peer review of the RFP documents. The original procurement of an insurance consultant to help manage the OCIP was delayed due to protests. The City has resolved the protests and can now proceed with issuance of a new RFP. The City has noted that there was no cost impact realized as a result of the protest. The City anticipates issuing RFP Part I in March 2011. RFP Part II is anticipated to be issued in May 2011. Selection is targeted to be completed in July 2011, with NTP to be issued in August 2011.

Cultural Resources (Kako'o)

- Status – The City anticipates issuing RFP Part I in late February 2010 for a Cultural Resources Consultant, or Kako'o, based on the requirements of the Programmatic Agreement (PA). The City will submit RFP Part I to FTA and State Historic Preservation Division (SHPD) for review approval in March 2011. The consultant will report to SHPD and the consulting parties listed in the PA.

West Oahu/Farrington Highway (WOFH) DB Contract

- Scope – This contract includes the design and construction of a portion of the guideway alignment from the initial station at East Kapolei and continuing approximately 6.8 miles to a point just east of the planned Pearl Highlands station. Part of the alignment runs along the east side of North South Road. This portion of the guideway, which also includes alignment in the median of Farrington Highway, is being identified as the West Oahu/Farrington Highway Design-Build Contract. The guideway is comprised mostly of

a two-track aerial structure with a 0.3-mile portion of twin single-track guideways and a 0.3-mile section of guideway at grade.

As the alignment approaches Leeward Community College (LCC), the guideway alignment traverses from the median of Farrington Highway to the makai side of the highway where it transitions to an at-grade section. Once at grade, the entrances to the Maintenance and Storage Facility (MSF) are encountered. The Guideway crosses Ala Ike Road at two locations, with the roadway passing under the guideway alignment in box-culverts. At the LCC Station, a below-grade station plaza area is planned, to allow passengers to walk under the guideway to access either platform.

- Status – Kiewit Constructors was awarded a \$482,924,000 contract on November 18, 2009. Notice to Proceed (NTP) #1 was issued to Kiewit on December 1, 2009. The maximum reimbursable amount under NTP #1 was \$27 million. NTP #1 is for approximately 90 days and the scope of work for Kiewit is limited to the elements of PE whose principal purpose is refinement and validation of information supporting the NEPA process.

NTP #1A, which was issued March 11, 2010, authorized \$25.8 million for PE activities to be completed. NTP #1B, which was issued March 23, 2010, authorized \$21.2 million for interim design activities. The City has indicated that NTP #1A and NTP #1B would provide sufficient work for the contractor through approximately July 2010. NTP #1C, which was issued June 7, 2010, authorized \$3.5 million for test and demonstration drilled shafts to complete the deep foundations interim design. Work authorized under NTP #1C began on October 18, 2010 and is anticipated to be completed in March 2011. NTP #1D, which was issued January 6, 2011, authorized \$8.7 for continued administrative costs through June 2011 including project management, quality management, safety plan administration, coordination with local agencies, design management, and public information.

NTP #2, which was issued March 3, 2011, authorized \$62 million for work activities related to the relocation of utilities, in accordance with the City's pre-award authority associated with the FTA's issuance of a ROD

The City believes, and the PMOC concurs, that all work authorized under these NTPs is consistent with the permission the City received from FTA to enter PE or upon later receipt of the ROD.

The City anticipates submitting a Pre-FD LONP request for the WOFH contract only by April 2011. The value of the LONP request will be approximately \$5 million. If this Pre-FD LONP request is approved by FTA, it will allow the WOFH contractor to submit FD drawings to the City's Department of Planning and Permitting for permit approval. The City has indicated the Department of Planning and Permitting typically takes greater than 120 days to review and approve permits. The justification, cost and schedule will be provided by the City in the Pre-FD LONP request. The City will also be seeking a LONP for construction activity to begin in fall of 2011.

The contractor has provided the City with the Definitive Design Submittals and has begun preparing Interim Design submittals.

- Schedule – The City has approved the baseline schedule submittal. The contractor is preparing a schedule analysis for NTP delays.
- Cost
 - Original Contract Value – \$482,924,000
 - Current Contract Value – \$482,924,000
 - Authorized Costs for NTP #1, 1A, 1B, 1C & 1D – \$96,750,438
 - Expended to Date – \$78,915,219
 - % Expended – 16.3%
 - Approved Change Orders – \$0.00
 - Total Encumbrance (City) – \$520,846,930
- Issues or Concerns
 - The executed agreement for the WOFH DB Contract calls for issuance of all four NTPs within 120 calendar days of the December 1, 2009 NTP #1 date. Since that requirement was not met, the City reviewed Kiewit's schedule of milestones and the baseline schedule to determine whether there has been a schedule or a cost impact. The City officially approved Kiewit's schedule on April 30, 2010. The City also formally responded on April 28, 2010 to Kiewit's request for change resulting in delay of NTPs # 2, 3 and 4. In its response, the City provided revised dates for Kiewit to assess the impacts of delays in the issuance of those NTPs. Specifically, the revised dates provided by the City to be used in Kiewit's assessment are as follows:
 - (1) NTP #2 – July 15, 2010
 - (2) NTP #3 – September 15, 2010
 - (3) NTP #4 – December 15, 2010

However, subsequent to the April 28, 2010 letter, the City sent an RFCR to Kiewit on September 9, 2010 that superseded the previous dates above stating that NTPs #2, 3 and 4 would not occur until March 15, 2011 and that Kiewit should revise its schedule accordingly. The PMOC has strongly cautioned the City against providing unrealistic dates to the contractor, given the requirements that must be met prior to issuance of any LONPs.

- The WOFH Segment DB Contract will utilize an existing facility for precasting and prestressing the concrete guideway segments. The casting facility, located in Campbell Industrial Park, is approximately 27 acres and is in close proximity to the WOFH project. GPRM Prestress is a certified plant under the PCI (Precast/Prestressed Concrete Institute) Certification Program. It is certified to produce the following:
 - A1 – Architectural Precast Concrete Products

- B3 – Prestressed Straight-Strand Bridge Beams (Superstructure), Precast Bridge Products (No Prestressed Reinforcement), and Prestressed Miscellaneous Bridge Products (Non-Superstructure)
- C4 – Prestressed Deflected-Strand Structural Members, Precast Concrete Products (No Prestressed Reinforcement), Prestressed Hollow-Core and Repetitively Produced Products, and Prestressed Straight-Strand Structural Members

It is the PMOC's professional opinion that the size of the facility is sufficient to support the precasting and prestressing requirements for the WOFH DB Contract. Detail on the infrastructure of the facility, including concrete batching capacity, has not been provided at this time; therefore, the capacity of the current infrastructure cannot be assessed to determine whether modifications will be required beyond installation of precasting and prestressing beds to manufacture the elevated guideway segments specific to this project.

Kamehameha Highway Guideway DB Contract

- Scope – The contractor will design and construct a portion of the guideway alignment from the initial station at East Pearl Highlands to a point just east of the planned Aloha Stadium Station, a distance of approximately 3.9 miles. This portion of the guideway is being identified as the Kamehameha Highway Design-Build Contract. The guideway is comprised of a two-track aerial structure.
- Status – The Kamehameha Highway Guideway was originally to be constructed using DBB, but the City decided to utilize DB to take advantage of the perceived favorable bid climate. RFP Part 1 was issued on November 18, 2009, with responses received on January 5, 2010. RFP Part 2 was issued on March 19, 2010. Technical and price proposals were due September 9, 2010. However, the due date was extended to October 7, 2010, with prices now valid until April 5, 2011. Technical and price proposal evaluations were anticipated to be completed by the City on November 10, 2010. However, the City has elected to request Best and Final Offers (BAFO) from the proposers. The first BAFO was received on December 30, 2010 and the second call for BAFO evaluation is in process and anticipated to be completed by the second week of March 2011. The City intends to make a selection by March 18, 2011 with NTP #1 anticipated to be issued in April 2011.

RFP Part 2 contains PE-level documents. The contractor will advance the drawings in the RFP Part 2 contract documents to the Definitive and Interim Design levels during the Advanced PE phase of the project.

- Cost – The budget for this contract is \$323.5 million.
- Schedule – The Kamehameha Guideway DB project is approximately 48 months in duration.
- Issues or Concerns

- The PMOC received RFP Part 2 documents on April 8, 2010 for this contract. The PMOC presented its disposition of PE completion in the "Project Scope Review" report, which was submitted as a working draft in January 2011. This report will be updated upon review of the selected proposal.

Maintenance and Storage Facility DB Contract

- Scope – The contractor will design and construct the MSF to accommodate 80 revenue vehicles. The maximum capacity of the site is 100 revenue vehicles. The Shop Facility will include administrative and operational offices for the agency, including an Operations Control Center. The MSF will be designed and commissioned to achieve Leadership in Energy and Environmental Design (LEED) Green Building Rating System Silver Certification, and will operate in accordance with FTA Sustainable Maintenance and Operational Standards. The scope of the contract includes the procurement of all rail materials.
- Status – RFP Part 1 was issued on May 28, 2009. RFP Part 2 was issued on July 24, 2009. Technical and price proposals were received on February 17, 2010, with prices valid until August 16, 2010. The City issued a letter of intent to award the MSF contract to Kiewit/Kobayashi Joint Venture on June 24, 2010 in the amount of \$195 million. A letter of intent to award is not a contractual obligation and does not result in issuance of an NTP as would execution of a contract. The City's cost estimate was \$254 million. The price proposal expired on August 16, 2010, but the City sent a letter to Kiewit/Kobayashi requesting an extension of their pricing until March 15, 2011. The City issued a letter on February 9, 2011 to the contractor to confirm that they will accept a contract in the amount of \$195 million based on their price proposal that was submitted on June 24, 2010. The City received a response from Kiewit/Kobayashi in late February 2011. The contractor noted an exception to the milestones in the contract but did not specifically indicate concern with maintaining the proposal price. The City is in the process of responding to Kiewit/Kobayashi's issues. The City has indicated that NTP #1 will be issued in April 2011.

RFP Part 2 contains PE-level documents. The contractor will advance the drawings in the RFP Part 2 contract documents to the Definitive and Interim Design levels during the Advanced PE phase of the project.

- Cost – The budget for this contract is \$254 million, of which approximately \$156 million is for MSF design and construction and the remainder, is for track material procurement.
- Issues or Concerns
 - The Memorandum of Agreement (MOA) has been executed with the DHHL for the Navy Drum Site. However, the City must sign a License Agreement with the DHHL prior to any construction beginning.
 - The City anticipates that Kiewit/Kobayashi will submit a change order for material cost escalation since its price was only valid for 180 days from receipt, which occurred on February 17, 2010. In the FINAL DRAFT Risk Assessment Report provided by the City on January 5, 2011, an adjustment was made to the Base Cost

Estimate for the material escalation associated with this contract. The City intends to negotiate a change order after issuing NTP #1. However, the PMOC recommended that the City negotiate this change order prior to issuing NTP #1, which is anticipated to be issued by the City in April 2011.

Vehicle/Core Systems DBOM Contract (CSC)

- Scope – A Design-Build-Operate-Maintain (DBOM) contract is anticipated to be awarded by the City to more closely synchronize with ROD and will include the following:
 - Design and manufacture of vehicles
 - Design, manufacture, and installation of systems components including train control communications, traction power, Central Control and fare collection equipment
 - Operations and Maintenance.

The Operations and Maintenance contract will extend 5 years beyond the full build revenue date (2019), with an additional 5 year option. The Operations and Maintenance contractor will be responsible for Intermediate Operating Section Openings.

- Status – RFP Part 1 for the Vehicles/Core Systems Design-Build-Operate-Maintain Contract (CSC) was issued on April 8, 2009. RFP Part 2 was issued on August 17, 2009. Technical and price proposals were received on June 7, 2010, with price proposals valid until December 4, 2010. The City held a first meeting with each offeror during the week August 8, 2010 to address technical and quality components of their proposals. Informational meetings with the offerors were also held the week of September 20, 2010. The City issued a Request for BAFO on November 4, 2010. BAFO responses were received on January 18, 2011. However, based on discussions held with the three Priority Listed Offerors, the City issued a 2nd call for BAFO's on February 9, 2011. Responses were received the week of February 21, 2011. The City anticipates issuing NTP #1 in April 2011.
- Cost – The budget for this contract is \$650 million, including equipment and installation.
- Issues or Concerns
 - The PMOC received RFP Part 2 documents on May 12, 2010 for this contract. The PMOC presented its disposition of PE completion in the "Project Scope Review" report, which was submitted as a working draft in January 2011. This report will be updated upon review of the selected proposal.
 - The PMOC participated in a workshop on August 31-September 1, 2010 with the City, PMC and the GEC to discuss the CSC Terms and Conditions and to obtain a general understanding of how the RFP Part II documents were developed. The City also provided a list of the makeup of the evaluation and technical committees, to allow a better assessment of the City's approval process. The PMOC will schedule another workshop after the City selects the contractor to discuss the basis of the awarded contract and any follow-up questions the PMOC may have once it reviews the final contract, including any addendums issued by the City and Alternate Technical Concepts submitted by the contractor. This will assist the PMOC with

assessments of the Technical Capacity and Capability of the Grantee and reviews of the project Scope, Schedule and Cost as the grantee prepares to receive approval from the FTA to enter FD.

Airport Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Aloha Stadium Station to Middle Street Station.
- Status – The RFQ for design services was issued in January 2011 with responses due in March 2011. The City anticipates issuing an NTP in August 2011.
- Cost – The estimated contract value will be available when the revised bottoms-up estimate is complete.
- Issues or Concerns
 - None identified at this time.

City Center Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Middle Street Station to Ala Moana Center Station. The guideway contract will likely now include the Ala Moana Center Station.
- Status – This segment is in the PE phase. The PE drawings are under final review by the City, and the GEC is completing quantity take-offs.
- Cost – The estimated contract value will be available when the revised bottoms-up estimate is complete.
- Issues or Concerns
 - None identified at this time. The City is in the process of finalizing third party agreements for utility relocations.

Station Packages

- Scope – All stations will be implemented using DBB. The City has developed station group packages for design, and it intends to issue construction contracts based on those station packages. Following are the packages that the City is currently considering:
 - West Oahu Station Group (3 stations): East Kapolei, UH-West Oahu and Hoopili.
 - Farrington Station Group (3 stations): West Loch, Waipahu Transit Center and Leeward Community College.
 - Kamehameha Station Group (3 stations): Pearl Highlands, Pearlridge and Aloha Stadium.

- Airport Station Group (3 stations): Pearl Harbor Navy Base, Honolulu International Airport, and Lagoon Drive.
- Dillingham Station Group (3 stations): Middle Street Transit Center, Kalihi and Kapalama.
- City Center Group (3 stations): Iwilei, Chinatown and Downtown.
- Kakaako Station Group (2 stations): Civic Center and Kakaako, plus station finishes on the Ala Moana Station
- Pearl Highlands Station Parking Garage and H2 Ramps
- Status
 - The City selected HDR/HPE, Inc. for the Farrington Station Group Design Contract. NTP #1A was issued on January 12, 2011 for \$120,000 to begin preparing the Schedule of Milestones and the Design Workshop. NTP #1B was issued for approximately \$1 million in February 2011 to begin advanced PE.
 - The RFQ to begin advanced PE for the Kamehameha Station Group Design Contract is expected to be released in March 2011.
 - The RFQ for the West Oahu Station Group was released January 13, 2010, with responses received on February 17, 2010. Due to the length of time that had elapsed between submittal of proposals and the potential date for selection (November 2010), the City allowed the proposers to “refresh” their proposals. Refreshed proposals were received in February 2011 and have been evaluated. Selection is anticipated for March 2011 with NTP #1 anticipated to be issued in April 2011.
- Cost
 - The budget for the Farrington Station Group design contract is \$5.5 million.
- Issues or Concerns
 - None identified at this time.

Elevators and Escalators

- Scope – The City intends to issue a DB contract to furnish, install, test, and commission all elevator and escalator equipment.
- Status – The City anticipates procuring this contract in 2011. Limited PE has been completed for this package.
- Schedule – Following are the key contract dates:
 - Prepare Procurement Packages – January 2011
 - Bid-Award Elevator Packages – May 2011
 - Elevator & Escalators Construction – January 2012
- Cost – The estimated contract values will be available when the bottoms-up estimate is complete.
- Issues or Concerns
 - None identified at this time.

Appendix C: PE Status by Contract

Note: Within the context of this matrix, Advanced PE is subjectively defined as greater than 30% and less than 65%. Design development greater than 65% typically occurs during Final Design. Within the confines of the DB contracts, the Special Provisions define the following design stages:

- (1) *Definitive Design*
- (2) *Interim Design*
- (3) *Final Design*
- (4) *Working Plans*
- (5) *As-Constructed Plans and Specifications*

The Special Provisions of each contract provide specific criteria for each design phase.

Contract	Segment	PE Status	Notes
West Oahu Farrington Highway Guideway DB Contract	Segment I – East Kapolei to Pearl Highlands Length: 6 miles	GEC I prepared contract documents for DB procurement, including 30% plans. Advanced PE continuing by Kiewit under NTP #1, 1A, 1B & 1C. The City issued NTP #2 on March 3, 2011 for work activities related to the relocation of utilities based on the City's pre-award authority associated with the FTA's issuance of a ROD. Kiewit submitted Definitive Design Submittals and has begun preparing Interim Design submittals. Geotechnical investigations ongoing by Kiewit. Method (3) and Load Test Shafts (5) have been completed. Four Load Test Shafts are remaining, which continue to support Definitive Design submittals that started on October 18, 2010 and are anticipated to be completed in March 2011. However, Interim Design will continue once the test and demonstration drilled shafts activity is completed.	
Kamehameha Highway Guideway DB Contract	Segment II – Pearl Highlands to Aloha Stadium Length: 4 miles	GEC I prepared contract documents for DB procurement, including 30% plans. Advanced PE will be performed with City's selection of design consultant in March 2011. Once selection occurs, contractor will advance plans to Definitive and Interim Design levels under limited NTPs.	

Contract	Segment	PE Status	Notes
Airport Guideway Contract and Utilities Relocation DBB Contract	Segment III – Aloha Stadium to Middle Street Length: 5 miles	GEC I prepared 30% plans for segment. Advanced PE will be performed with City's selection of design consultant in June 2011 and issuance of NTP in August 2011.	
City Center Guideway & Utilities DBB Contracts	Segment IV – Middle Street to Ala Moana Center Length: 5 miles	GEC I prepared 30% plans for segment. Advanced PE will be performed with City's selection of design consultant in December 2011.	
Maintenance & Storage Facility DB Contract	Segment I	GEC I prepared contract documents for DB procurement, including 30% plans. Once selection occurs, contractor will advance plans to Definitive and Interim Design levels under limited NTPs. The City intends to issue NTP #1 in April 2011 allowing mobilization, insurance, plans and procedures and Definitive Design.	
WOFH Station Group (3) DBB Contract	Segment I	GEC I prepared 20% plans for segment. Advanced PE will be performed with the City's selection of a design consultant in March 2011. FD is anticipated to begin in September 2011.	
Farrington Station Group (3) DBB Contract	Segment I	GEC I prepared 20% plans for segment. City selected HDR/HPE, Inc as the design consultant and issued NTP #1A on January 12, 2011 to begin preparing the Schedule of Milestones. NTP # 1B will be issued in March 2011 to begin advanced PE.	
Kamehameha Station Group (3)	Segment II	GEC I prepared 20% plans for segment. Contract is expected to be released in late March 2011. FD anticipated to begin in October 2011.	
Airport Station Group (3)	Segment III	GEC I prepared 20% plans for segment. FD anticipated to begin in March 2013.	
Dillingham Station Group (3)	Segment IV	GEC I prepared 20% plans for segment. FD anticipated to begin in August 2013.	
City Center Station Group (3)	Segment IV	GEC I prepared 20% plans for segment. FD anticipated to begin in January 2014.	
Kakaako Station Group (3)	Segment IV	GEC I prepared 20% plans for segment FD anticipated to begin in August 2014.	

Contract	Segment	PE Status	Notes
Pearl Highland H2 Ramps and Multiple Parking Structure	Segment I	GEC I prepared 20% plans for segment. City is repackaging to include the Pearl Highland Station in the KH Station Group and to separate the H2 Ramps and Multiple Parking Structure into a separate contract. FD anticipated to begin in December 2015.	
Core Systems Contract DBOM Contract	Segment I-IV	<p>GEC I prepared contract documents for DBOM procurement, including 15-20% plans. Contractor will advance the conceptual drawings and performance specifications in the RFP Part 2 contract documents to the Definitive and Interim Design levels during the early portion of contract.</p> <p>Selection of a contractor is anticipated in March 2011 with NTP #1 anticipated to be issued in April 2011.</p>	PMOC is of the opinion that various levels of detail, which include basic conceptual drawings with limited performance criteria, have been completed by the GEC. This information must be augmented by technical proposal from the selected contractor, which is under review by the PMOC.

Appendix D: Bidding Schedule

Contract	Type	RFP - DBB		RFP Part I - DB		RFP Part II - DB		Exec.	LONP Request			NTP				Contr. Value (M)
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.	NTP Value (M)	
West Oahu Farrington Highway (WOFH) Guideway	DB	N/A	N/A	04-Feb-09	13-Mar-09	03-Apr-09	28-Aug-09	17-Nov-09	—	—	—	1	01-Dec-09	PE to support to FEIS	\$48.2	\$482.9 ⁽¹⁾
												1A	11-Mar-10	Geotech	\$4.7	
												1B	23-Mar-10	Interim Design (PE)	\$21.2	
												IC	04-Jun-10	Test Shafts	\$14.0	
												1D	TBD	Admin & Bonds	TBD	
												2	15-Feb-11	Utility Relocations	—	
												3	15-Aug-11	FD	—	
												4	15-Sep-11	Construction	—	
Kamehameha Highway Guideway (KHG)	DB	N/A	N/A	18-Nov-09	05-Jan-10	19-Mar-10	07-Oct-10 (BAFO due 20-Dec-10)	—	—	—	1	08-May-11	PE	—		
											2	TBD	FD	—		
											3	TBD	Construction	—		
Maintenance and Storage Facility (MSF)	DB	N/A	N/A	29-May-09	02-Jul-09	24-Jul-09	17-Feb-10	—	—	—	1	15-Mar-11	PE	—	\$195.0 ⁽¹⁾	
											2	08-Aug-11	FD	—		

Contract	Type	RFP - DBB		RFP Part I - DB		RFP Part II - DB		Exec.	LONP Request			NTP			Contr. Value (M)	
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.		NTP Value (M)
												3	28-Nov-11	Construction	—	
Vehicle/Core Systems Contract (CSC)	DBO M	N/A	N/A	09-Apr-09	05-Jun-09	17-Aug-09	07-Jun-10 (BAFO due 18-Jan-11)		—	—	—	—	02-Mar-11	—	—	
Airport Utility Relocation	DBB	01-Nov-12	28-Feb-13	N/A	N/A	N/A	N/A		—	—	—	—	01-Mar-13	—	—	
Airport Guideway	DBB	22-Feb-13	22-Jun-13	N/A	N/A	N/A	N/A		—	—	—	—	23-Jun-13	—	—	
City Center Utility Relocation	DBB	15-Feb-13	14-Jun-13	N/A	N/A	N/A	N/A		—	—	—	—	15-Jun-13	—	—	
City Center Guideway & Ala Moana Station	DBB	7-Nov-13	6-Mar-14	N/A	N/A	N/A	N/A		—	—	—	—	16-Apr-14	—	—	
West Oahu Station Group (3)	DBB	15-Aug-12	12-Dec-12	N/A	N/A	N/A	N/A		—	—	—	—	13-Dec-12	—	—	
Construction DBB Contract	DBB	01-Mar-12	28-Jun-12	N/A	N/A	N/A	N/A		—	—	—	—	29-Jun-12	—	—	
Farrington Station Group (3)	DBB	11-Jun-15	08-Oct-16	N/A	N/A	N/A	N/A		—	—	—	—	09-Oct-16	—	—	
Pearl Highlands Parking and Ramps	DBB	25-Oct-12	21-Feb-13	N/A	N/A	N/A	N/A		—	—	—	—	22-Feb-13	—	—	
Kamehameha Station Group (2)	DBB	07-Jun-14	04-Oct-14	N/A	N/A	N/A	N/A		—	—	—	—	05-Oct-14	—	—	
Airport Station Group (3)	DBB	04-Nov-14	03-Mar-15	N/A	N/A	N/A	N/A		—	—	—	—	04-Mar-15	—	—	
Dillingham Station Group (3)	DBB															

Contract	Type	REP - DBB		RFP Part I - DB		RFP Part II - DB		Exec.	LONP Request			NTP				Contr. Value (M)
		Advert	Bid	Advert	Qual.	Issue	Proposal		Draft	Final	FTA Approve	NTP	Date	Desc.	NTP Value (M)	
City Center Station Group (3)	DBB	01-Jun-15	30-Apr-15	N/A	N/A	N/A	N/A		—	—	—	01-May-15	—	—		
Kakaako Station Group (3)	DBB	14-Nov-15	12-Mar-16	N/A	N/A	N/A	N/A		—	—	—	13-Mar-16	—	—		
Elevators/Escalators	DBB	02-Jul-11	25-Oct-11	N/A	N/A	N/A	N/A		—	—	—	25-Nov-11	—	—		
Plants and Shrubs (Owner Furnished)	DBB	01-Aug-11	15-Dec-11	N/A	N/A	N/A	N/A		—	—	—	02-Jan-12	—	—		
Fare Collection (Owner Furnished)	DBB	—	—	N/A	N/A	N/A	N/A		—	—	—	—	—	—		

1 Indicates actual bid amount

Appendix E: PE Approval Letter Requirements

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
	Project Scope, Design and Development					
1	Identify any third party agreements necessary for project completion, including utility agreements with private and public owners and military	LR / HLB	Jan-10	Jan-10		Complete
2	Resolve the specific regarding proximity of the guideway to runways 22R/4L and 22L/4R at the Honolulu International Airport with HDOT and FAA	HLB	Apr-10	May-10		Complete
3	Fully develop vehicle basis of design and functional sizing	JS	Mar-11		2.11 (CSC) 2.15 (CSC) 3.24 3.31 CSC Proposal	PMOC will review selected proposal to determine whether it meets operational criteria; it is anticipated review will take one month
4	Determine rail fleet size requirement	JS	Mar-11		3.24 CSC Proposal	Will be addressed in CSC DBOM proposal
5	Fully develop scope for the administration building and operations control center	JS / HLB	Mar-11		2.11 (MSF) 2.15 (MSF) 3.24 3.31	
6	Determine the final location of the maintenance and storage facility	FM	Mar-11		3.62	License Agreement is under review
7	Finalize a contracting/packaging plan which includes a source selection plan(s) and contract specific work plans	SZ	Mar-11		3.51	
8	Develop strategies to streamline the City's process to award contracts and to enter into grant agreements, especially as applicable to FTA grants	LR	Jun-11		HART Res. Do we need more here?	Resolution provided to FTA and PMOC after City Council approval in Dec-09. Will be included on ballot in Nov-10 election.
9	Develop a preliminary operation plan	JS	Mar-10	08-Feb-10		Complete

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
10	Ensure the service velocity does not erode over the next course of design changes	JS	Mar-11		2.11 (CSC) 2.15 (CSC) CSC Proposal	Will be addressed in CSC DBOM proposal
Project Schedule						
11	Provide a baseline of the master Project Schedule (MPS) early in PE which will be used for monthly progress updates and tracking schedule variances	MH	Mar-11		2.24	Revised baseline to be submitted in Dec-10
12	Address the utilization manpower and equipment resource loading and budget and cost loading	MH	Mar-11		2.24	Revised baseline to be submitted in Dec-10; City acknowledged that schedule is cost loaded but will not be resource loaded
13	Include critical activities in the MPS: utility activities, real estate acquisitions, system integration, starting and testing, operational commissioning and training, vehicle procurement, major construction material procurement, FTA review and comment, detail activities for early construction packages	MH	Mar-11		2.24 2.25 2.26	Revised baseline to be submitted in Dec-10
14	Develop a right-of-way schedule	MH	Mar-11		2.26	Initial schedule submitted 29-Oct-09; will be revised in Dec-10
15	Modify the Work Breakdown Structure to cross over with the project budget and cost breakdown structure	MH	Jan-10	21-Dec-09		Complete
Project Cost						

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
16	Develop a detailed bottoms-up-style project cost estimate to Standard Cost Category format. The estimate should be detailed sufficiently to determine distributions of materials, labor, equipment and general conditions elements at a minimum. The soft cost estimates should be based on staffing plans, force account plans, contracts and so forth rather than solely on percentages. The estimate should eliminate parametric-style values, cost estimating relationships, and lump sums as much as possible during PE	MH	Mar-11		2.21 2.22 2.23	Revised baseline to be submitted in Dec-10
17	Escalate the cost estimate in accordance with the MPS	MH	Mar-11		2.21 2.22 2.23	Pending completion of Item No. 16
18	Provide justification and backup documents to support the quantification and assumptions for the "soft costs" and related general conditions of the project	MH	Mar-11		2.23	Pending completion of Item No. 16
19	Technical Capacity Configuration management and change control mechanism	KG	Feb-11	Jan-11	3.10 et al 3.32	Complete
20	Develop detailed staffing plans for all remaining phases of the project to ensure adequate technical capacity. The plans should include the dates by which the City will fill each key position. All key City management positions should be filled during PE.	TH/PR	Mar-11		3.02	
21	Work with the State of Hawaii to establish a State Safety Oversight Agency office to oversee the project	KA	Apr-10	6-Apr-10		Complete
22	Submit a fully developed Rail Fleet Management Plan	JS	Mar-11		3.24	

No.	Item	City Responsible Person	Target Completion Date	Actual Completion Date*	Roadmap Crosswalk ID #	Comments
23	Have a quantifiable metrics for measuring the real status of work, both cost and schedule of all professional service contracts, and any inter-local agreements for participatory services	MH	Mar-11		3.10 et al	
24	Develop a Contingency Management Plan which will identify the specific risks and implement the anticipated mitigation measures	SZ	Apr-11		3.22	
25	Develop an Environmental Mitigation Program that identifies required environmental mitigation actions and the party responsible for the mitigation and that will eventually become the basis for quarterly mitigation monitoring and quarterly mitigation reports	JA/FM	Dec-10	Jan-11	3.33	Complete
26	Update and implement the:					
	Real Estate Acquisition and Management Plan	JJ	Jan-11	Jan-11	3.23	
	Bus Fleet Management Plan	PK	May-11		3.25	BFMP will be finalized based on data from Financial Plan
	Safety and Security Management Plan	KA	Mar-11		3.26	
	Quality Management Plan	AB	Dec-10	12-Jan-11	3.35	
					3.36	

*Note: Actual Date to be added only upon verification of satisfactory completion by FTA and/or PMOC.

Appendix F: Project Overview and Map (Transmitted as a separate file)

Appendix G: Safety and Security Checklist (Transmitted as a separate file)

Appendix F: Project Overview and Map

Date: March 2011
Project Name: Honolulu High-Capacity Transit Corridor Project
Grantee: City and County of Honolulu
FTA Regional contact: Catherine Luu
FTA HQ contact: Kim Nguyen

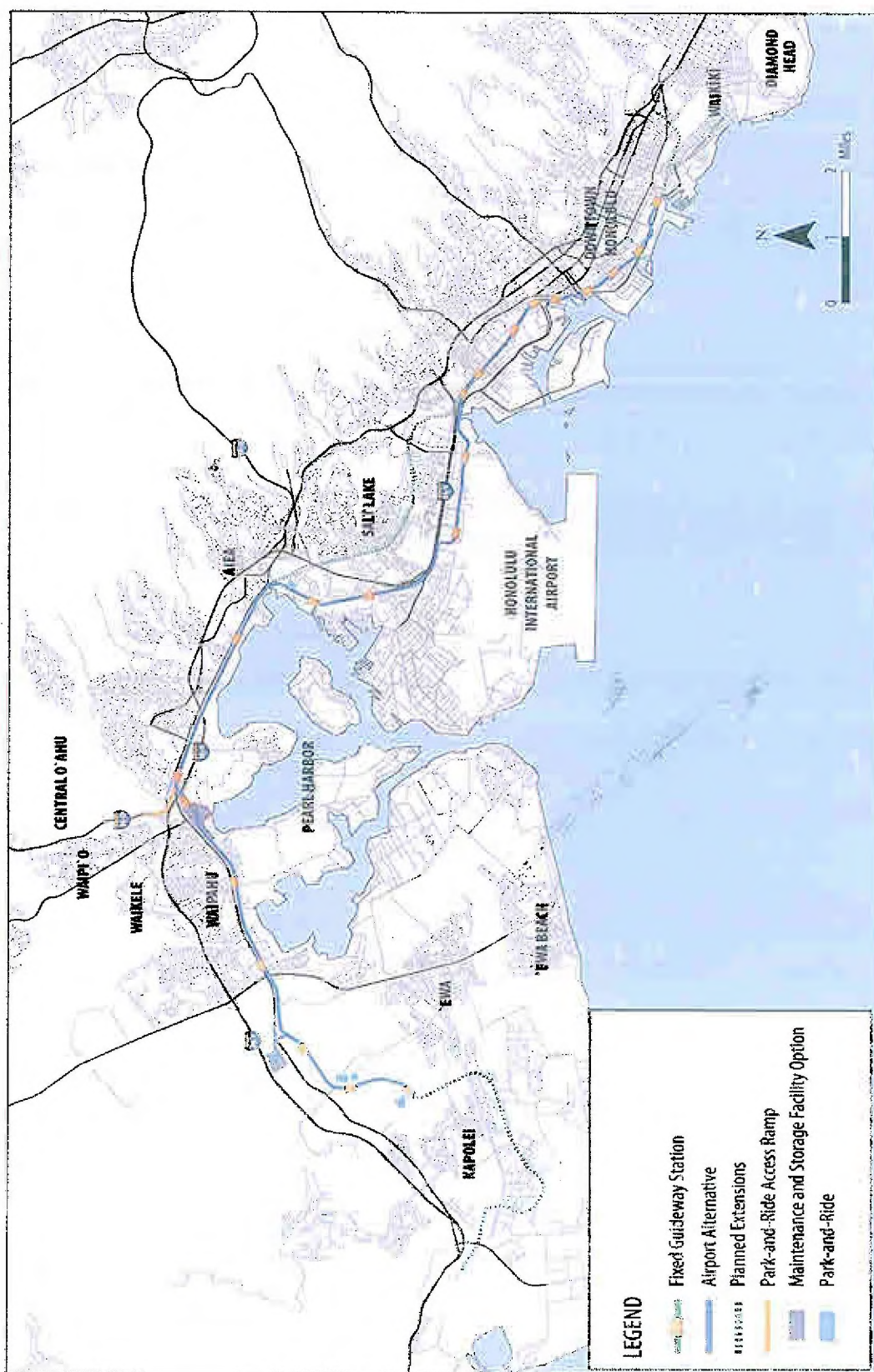
SCOPE

Description The proposed Project is an approximately 20-mile rail alignment extending from East Kapolei to Ala Moana Center.
Guideway The majority of the Project is to be built on aerial structure, but the Project also includes a short at-grade section (0.7 miles).
Stations 21 stations (20 aerial and 1 at-grade)
Support Facility Maintenance and Storage Facility located near Leeward Community College
Vehicles 76 light metro rail (identified as a "heavy rail" in the SCC workbook)
Ridership 97,500 weekday boardings in 2019; 116,300 weekday boardings in 2030

SCHEDULE 10/09 Approval Entry to PE 03/19 Estimated Rev Ops at Entry to PE
03/19 Estimated Rev Ops in Jan-11 MPS

COST \$5.348 B Total Project Cost (\$YOE) at Approval Entry to PE
\$5.348 B Total Project Cost (\$YOE) at date of this report including \$290.294 M in Finance Charges
\$1505 M Amount of Expenditures at date of this report
2.8% complete (Total Project Expenditures/Total Project Cost)

Honolulu High-Capacity Transit Corridor Project Map



Appendix G: Safety and Security Checklist

Project Overview			
Project Name		Honolulu High-Capacity Transit Corridor	
Project mode (Rail, Bus, BRT, Multimode)		Rail	
Project phase (Preliminary Engineering, Design, Construction, or Start-up)		PE	
Project Delivery Method (Design/Build, Design/Build/Operate Maintain, CMGC, etc)		DB and DBB	
Project Plans	Version	Review by FTA	Status
Safety and Security Management Plan	2.0		Update due Jan-11
Safety and Security Certification Plan	0.0		Update due Feb-11
System Safety Program Plan			Submittal date TBD
System Security Plan or Security and Emergency Preparedness Plan (SSEPP)			Submittal date TBD
Construction Safety and Security Plan			
Safety and Security Authority	Y/N	Status	
Is the grantee subject to 49 CFR Part 659 state safety oversight requirements?	Y		
Has the state designated an oversight agency as per Part 659.9	Y	Executive Order 10-04 effective April 6, 2010	
Has the oversight agency reviewed and approved the grantee's SSPP as per Part 659.17?	N	Pending	
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	N	Pending	
Did the oversight agency participate in the last Quarterly Program Review Meeting?	N	Pending	
Has the grantee submitted its safety certification plan to the oversight agency?	N	Pending	
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	Pending	
SSMP Monitoring			
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y		
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	Y		
Does the grantee implement a process through which the Designated Function (DF) for Safety and DF for Security are integrated into the overall project management team? Please specify.	Y		
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	Y		
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	Y		
Does the grantee update the safety and security responsibility matrix/organization chart as necessary?	Y		
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	Y		
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	Y		

Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Chapter 3 of the SSMP describes the progress of safety and security activities for all project phases.
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	Y	Chapter 4 of the SSMP ensures the conduct of preliminary hazard and vulnerability analyses.
Has the grantee ensured the development of safety design criteria?	Y	
Has the grantee ensured the development of security design criteria?	Y	
Has the grantee verified conformance with the safety and security requirements in the design?	Y	
Has the grantee identified conformance with safety and security requirements in equipment and materials procurement?	Y	
Has the grantee verified construction specification conformance?	Y	
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	Y	
Has the grantee verified conformance with safety and security requirements during testing, inspection and start up phases?	Y	
Does the grantee evaluate change orders, design waivers, or test variances for potential hazards and/or vulnerabilities?	Y	
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	Y	
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: <ul style="list-style-type: none"> • Activation Plan and Procedures • Integrated Test Plan and Procedures • Operations and Maintenance Plan • Emergency Operations Plan 	Y	
Has the grantee issued final safety and security certification?	N	
Has the grantee issued the final safety and security verification report?	N	
Construction Safety		
Does the grantee have a documented/implementation Contractor Safety Program with which it expects contractors to comply?		Submittal pending
Does the grantee's contractor(s) have a documented company-wide safety and security program plan?		Submittal pending
Does the grantee's contractor(s) have a site-specific safety and security program plan?		Submittal pending
Provide the grantee's OSHA statistics compared to the national average for the same type of work?		Submittal pending

If the comparison is not favorable, what actions are being taken by the grantee to improve its safety record?		Submittal pending
Does the grantee conduct site audits of the contractor's performance versus required safety/security procedures?		Submittal pending
Federal Railroad Administration		
If the shared track: has the grantee submitted its waiver request application to FRA? (Please identify any specific regulations for which waivers are being requested)	NA	
If the shared corridor: has grantee specified specific measures to address shared corridor safety concerns?	NA	
Is the Collision Hazard Analysis underway?	NA	
Other FRA required Hazard Analysis – fencing, etc?	NA	
Does the project have Quiet Zones?	NA	
Does FRA attend Quarterly Review Meetings?	NA	

Sipes, Nancy (FTA)

From: Nguyen, Kim (FTA)
Sent: Monday, May 23, 2011 3:23 PM
To: Nguyen, Kim (FTA)
Subject: PMOC Monthly Report for Honolulu Project - April 2011
Attachments: Jacobs TO2 WO1-Honolulu Monthly Report APPENDIX G Apr-11 FINAL.doc; Jacobs TO2 WO1-Honolulu Monthly Report APPENDIX F Apr-11 FINAL.doc; Honolulu SCC Workbook 11-04.xlsm; Jacobs T02 W01 Honolulu Monthly Report Apr-11 FINAL.doc

Sipes, Nancy (FTA)

From: Nguyen, Kim (FTA)
Sent: Monday, May 23, 2011 3:23 PM
To: Nguyen, Kim (FTA)
Subject: PMOC Monthly Report for Honolulu Project - March 2011
Attachments: Honolulu SCC Workbook 11-03.xlsm; Jacobs T02 W01 Honolulu Monthly Report Mar-11 FINAL.doc; Jacobs TO2 WO1-Honolulu Monthly Report APPENDIX F Mar-11 FINAL.doc; Jacobs TO2 WO1-Honolulu Monthly Report APPENDIX G Mar-11 FINAL.doc
